THE ENDANGERED SPECIES ACT AND EXTINCTION OF RESERVED INDIAN WATER RIGHTS ON THE SAN JUAN RIVER

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I. INTRODUCTION

A major tributary of the legendary Colorado River, the San Juan River bisects the spectacularly stark Four Corners[1] region of the southwestern United States. Arising in the lofty peaks of southwest Colorado, the river flows 360 miles to empty into Lake Powell in Utah.[2] After tumbling out of the high country, the San Juan traverses the Southern Ute Indian Reservation in Colorado and drains the Jicarilla Apache Reservation to the south in New Mexico. Not far downstream, the river enters the Navajo Indian Reservation for the meandering balance of its journey, straying briefly onto the Ute Mountain Ute Reservation in Colorado (*see* map *infra* page 1306).

Despite living along the San Juan and its tributaries for countless generations, the Indian tribes within these reservations have only recently obtained federal funding for reclamation projects to finally develop their San Juan River water rights.[3] Yet the outlook for completion of these projects is bleak. The federal government has constructed massive reclamation projects largely for the benefit of non-Indians downstream that have effected enormous changes to the natural state of the Colorado River system.[4] As a result, native fish populations have declined so drastically that they now require the considerable protections of the Endangered Species Act of 1973 (ESA or "the Act").[5] Enforcement of the ESA by the federal government has preempted new projects for the development of Indian water from the San Juan River, destroying the tribes' ability to use their senior water rights while allowing this water to continue flowing downstream for the benefit of users claiming a lesser priority.[6]

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1. The "Four Corners" describes the point where the state boundaries of Utah, Colorado, New Mexico and Arizona intersect.

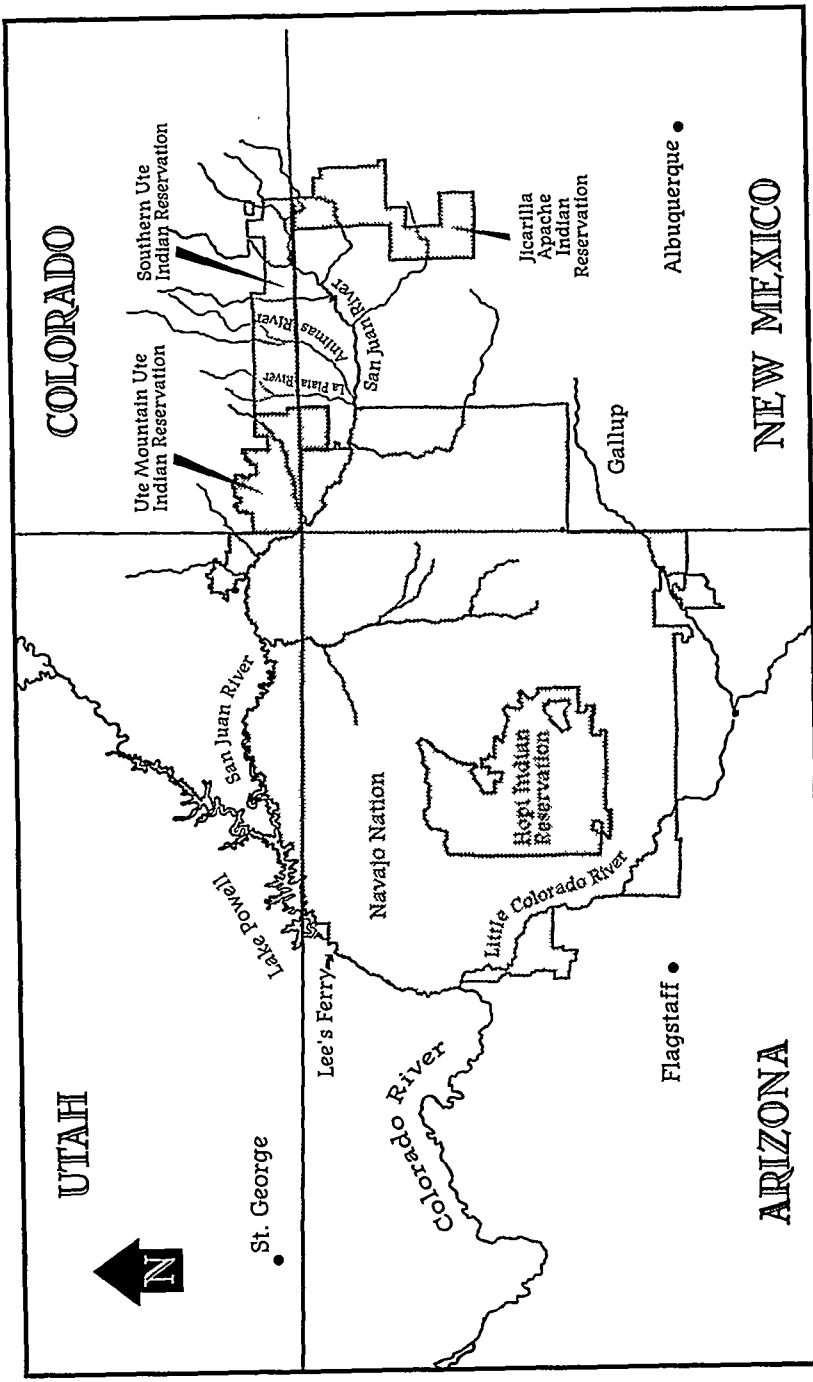
2. PHILIP L. FRADKIN, A RIVER NO MORE 31 (1981).

3. *See infra* notes 97–116 and accompanying text.

4. *See infra* notes 197–99 and accompanying text.

5. Pub. L. No. 93–205, 87 Stat. 884 (1973) (codified as amended at 16 U.S.C. §§ 1531–44 (1988 & Supp. 1994)).

6. *See infra* notes 179–99 and accompanying text.


COLORADO
NEW MEXICO
UTAH
ARIZONA
N
Southern Ute Indian Reservation
Ute Mountain Ute Indian Reservation
Animas River
La Plata River
San Juan River
Jicarilla Apache Indian Reservation
Albuquerque
Gallup
San Juan River
Lake Powell
Navajo Nation
Hopi Indian Reservation
Little Colorado River
Lee's Ferry
Colorado River
St. George
Flagstaff

This Note examines the conflicting rights to the waters of the San Juan River of the San Juan River tribes,[7] downstream water users, and endangered native fish. Part II of this Note tracks how reclamation of the Colorado River system was made possible through the development of the Law of the River, the unique body of agreements, court decrees and legislation governing the use of Colorado River Basin waters. In Part III, this Note discusses the unique nature of the Indian reserved water right and the fiduciary responsibility the federal government owes to Indian tribes. Part III also considers how the federal government engineered the development of the Colorado River system for non-Indian reclamation uses while largely ignoring the needs of Indians. Additionally, Part III comments on tribal water settlement agreements that anticipated the construction of reclamation projects for Indian use of the San Juan River.

The mechanisms of the ESA that determine whether federal actions will jeopardize species, and the actions government may take to mitigate potential harm to such species are described in Part IV. Part V discusses the nature of a de facto regulatory reserved water right implied under the ESA, and details both its preemptory effect on tribal use of San Juan River water, and subsequent tribal actions to avoid this effect.

In Part VI, this Note comments on the controversy regarding the purpose and scope of Indian reserved water rights, potential constraints to the use of this right imposed by the Law of the River and federal law, the development of intrastate marketing of state water rights, and the recent phenomenon of limited water marketing of Indian reserved rights authorized under negotiated settlements. Finally, Part VII proposes solutions to the preemption of development of San Juan River tribal reserved water rights, focusing on potential amendment of the ESA to require greater sensitivity to the federal trust responsibility to Indians, and arguing that the federal government must remove obstacles to off-reservation and interbasin marketing of preempted tribal water rights.

II. THE LEGAL FOUNDATION FOR RECLAMATION OF THE COLORADO RIVER SYSTEM—THE LAW OF THE RIVER

The Colorado River system drains approximately 244,000 square miles of seven states in the southwestern United States.[8] Despite its impressive trek of 1400 miles, the Colorado traverses primarily arid land. Thus, compared to the flows of the Mississippi or the Columbia Rivers, the Colorado's average annual flow of less than fifteen million acre-feet[9] seems paltry.[10] Even so, some of the

7. The term "San Juan River tribes" is used in this Note merely as a convenience in grouping together the Ute Mountain Ute Indian Tribe, the Southern Ute Indian Tribe, the Jicarilla Apache Indian Tribe, and the Navajo Nation. These tribes do not normally refer to themselves using this term unless perhaps in the context of common issues involving the San Juan River.

8. NORRIS HUNDLEY, JR., WATER AND THE WEST 2 (1975). The seven states encompassing land drained by the Colorado River and its tributaries are Wyoming, Colorado, Utah, New Mexico, Arizona, Nevada and California. *Id.*

9. An acre-foot is the volume of water required to cover an acre of completely level land to a depth of one foot. MERRIAM–WEBSTER'S COLLEGIATE DICTIONARY 11 (10th ed. 1993). One acre-foot equals roughly 326,000 gallons.

10. The Colorado's flow is only one-twelfth that of the Columbia River, and a mere thirty-third of the flow of the Mississippi. Norris Hundley, Jr., *The West Against Itself: The*

nation's most productive farm lands and largest metropolitan areas have come to rely on Colorado River Basin water.[11] As demand for the River's limited supply increases, so does the controversy surrounding allocation of that supply.[12]

Yet the completion of the numerous dams and diversion projects within the Colorado River Basin would not have been possible without the cooperation of all of the Basin states. Dating from the first major diversion of water in the Basin, interstate agreements on allocation of rights to Basin waters were necessary before Congress would authorize the funding of reclamation projects.[13] The allocation and use of the waters of the Colorado are governed by a series of acts of Congress, treaties, court decisions and state laws known collectively as "the Law of the River."[14]

The foundation for the Law of the River is the Colorado River Compact of 1922 (CRC).[15] Pressing water supply concerns of the Colorado River Basin states in the early years of the twentieth century compelled interstate cooperation within the Basin; the CRC was born of that compulsion.[16] The states of the Upper Basin, the source of the vast majority of the river's flow, feared that the exuberant development of southern California would establish senior rights under the prior appropriation doctrine.[17] In turn, the Lower Basin states needed the support of the other Colorado River Basin states in Congress

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Colorado River—An Institutional History, in NEW COURSES FOR THE COLORADO RIVER: MAJOR ISSUES FOR THE NEXT CENTURY 9, at 9 (Gary D. Weatherford & F. Lee Brown eds., 1986). *See* Charles W. Stockton & Gordon C. Jacoby, Jr., LONG-TERM SURFACE-WATER SUPPLY AND STREAMFLOW TRENDS IN THE UPPER COLORADO RIVER BASIN 38 (1976) (Lake Powell Project Bulletin No. 18) (reporting that according to a tree ring study conducted at the University of Arizona, the historical average flow of the Colorado may actually total not 15 million acre-feet, but a scant 13.2 million acre-feet); H.R. REP. NO. 1312, 90th Cong., 2d Sess. 3683, 3684 (1968) (reporting that the Colorado's annual virgin flow fluctuates from year to year, with historic highs of 24 million acre-feet in 1917 and 1983, and a historic low flow of 5.6 million acre-feet in 1934).

11. Los Angeles, Denver, Salt Lake City and Albuquerque all receive water from the Colorado River system for municipal use. William D. Back & Jeffery S. Taylor, *Navajo Water Rights: Pulling the Plug on the Colorado River?*, 20 NAT. RESOURCES J. 71, 71 (1980). In fact, more than half of the water needs of greater Los Angeles, San Diego and Phoenix are supplied from the Colorado River Basin. MARC REISNER, CADILLAC DESERT: THE AMERICAN WEST AND ITS DISAPPEARING WATER 125 (1986).

12. *See* Hundley, *supra* note 10, at 9. Hundley deemed the Colorado River "the most disputed body of water in the country and probably the world." Hundley, *supra* note 10, at 9.

13. *See* HUNDLEY, *supra* note 8, at 332–36 (emphasizing in particular the enduring significance of the Colorado River Compact, discussed *infra* notes 15–24 and accompanying text).

14. Paul L. Bloom, *Law of the River: A Critique of an Extraordinary Legal System, in* NEW COURSES FOR THE COLORADO RIVER, MAJOR ISSUES FOR THE NEXT CENTURY, *supra* note 10, at 139, 153 n.1.

15. The Compact concluded between the participating states in 1922 was not approved by Congress until 1928. 70 CONG. REC. 324 (1928).

16. *See* Hundley, *supra* note 10, at 14–16 (describing a series of events significantly impacting Basin water rights in the early 1920s).

17. *See* David H. Getches, *Competing Demands for the Colorado River*, 56 U. COLO. L. REV. 413, 416–17 (1985). The Upper Basin states, including portions of Wyoming, Colorado, Utah and New Mexico, realized that Colorado River water would be crucial to development of their states in the future. *Id.* at 415–16. For a brief discussion of the doctrine of prior appropriation, see *infra* notes 62–63 and accompanying text.

for federal reclamation projects planned to divert Colorado River water for irrigation, electrical power generation, and future municipal water supplies.[18]

The CRC was negotiated by representatives from each Basin state, under the supervision of the United States Secretary of Commerce, Herbert Hoover, who served as federal representative and chair of the negotiation sessions.[19] The CRC divided the flow of the river equally between the Upper and Lower Basins,[20] establishing the boundary at Lee's Ferry, Arizona.[21] Although no Indian representatives participated in the CRC negotiations, Secretary Hoover understood that concerns over Indian water rights were likely to arise in Congress when the Compact was presented for authorization.[22] While it did not address substantive issues of Indian water rights within the Colorado River Basin, Article VII of the CRC stated that "[n]othing in this Compact shall be construed as affecting the obligations of the United States of America to Indian tribes."[23]

In 1928, Congress finally approved the CRC via the Boulder Canyon Project Act (BCPA).[24] Under the BCPA, which authorized the construction of what is now known as Hoover Dam, the Lower Basin states were permitted to enter into an additional compact apportioning the Lower Basin's share of the River.[25] The BCPA anticipated that the 7.5 million acre-feet/year allocated to the Lower Basin would be apportioned by compact as follows: 4.4 million acre-feet/year to California, 2.8 million acre-feet/year to Arizona, and 300,000 acre-feet/year to Nevada.[26] However, this additional compact was never concluded by the Lower Basin states.

In contrast, the states of the Upper Basin agreed to apportion their allocation of Colorado River water under the Upper Colorado River Basin Compact of 1948 (UCRBC).[27] Article XIX of this compact followed the CRC's approach to Indian water claims, duplicating the language of Article VII of the CRC.[28] In order to authorize reclamation projects utilizing Upper Basin water

18. Getches, *supra* note 17, at 415–17. The Lower Basin consists of portions of Arizona, Nevada and California. Getches, *supra* note 17, at 417.

19. Hundley, *supra* note 10, at 16. For a detailed, yet engaging examination of the negotiation of the CRC, see HUNDLEY, *supra* note 8.

20. Article III(a) of the Compact apportioned 7.5 million acre-feet annually for "exclusive beneficial consumptive use" to each Basin. 70 CONG. REC. 324, 325 (1928). Congress later defined the term "consumptive use" in the Boulder Canyon Project Act as diversions less return flow to the river. Back & Taylor, *supra* note 11, at 75 n.23.

21. Lee's Ferry is located just downriver of the present location of Glen Canyon Dam. *See* Hundley, *supra* note 10, at 17. The division located portions of Utah and New Mexico in the Lower Basin, and assigned a small area of Arizona in the Upper Basin. Hundley, *supra* note 10, at 17.

22. *See* Back & Taylor, *supra* note 11, at 76. The Commerce Clause of the United States Constitution requires Congressional approval of compacts between states. U.S. CONST. art. I, §10, cl. 3.

23. 70 CONG. REC. 324, 325 (1928). Hoover termed this the "wild Indian article." Hundley, *supra* note 10, at 18.

24. Act of Dec. 21, 1928, Pub. L. No. 70–642, 45 Stat. 1057 (codified as amended at 43 U.S.C. §§ 617–617v (1988)).

25. 43 U.S.C. § 617c(a).

26. Arizona v. California, 373 U.S. 546, 573 (1963).

27. Act of Apr. 6, 1949, Pub. L. No. 81–37, 63 Stat. 31 (1949). The allocations were: 14.0% to Wyoming, 51.75% to Colorado, 23.0% to Utah, 11.25% to New Mexico, and 50,000 acre-feet/year to the Arizona portion of the Upper Basin. 63 Stat. 31, 33.

28. 63 Stat. 31, 42.

allocations defined in the UCRBC, Congress enacted the Colorado River Storage Project Act (CRSPA) in 1956.[29] Among the projects approved by the CRSPA was the Navajo Dam on the San Juan River in northern New Mexico, which would be instrumental to the viability of reclamation projects using San Juan River water.[30]

While the Upper Basin states launched ambitious new projects to use their Colorado River water allocations, Arizona found itself without similar reclamation programs. Because the Lower Basin states had not been able to agree to a compact allocating their 7.5 million acre-feet/year apportionment, Congress was unwilling to approve the proposed Central Arizona Project (CAP), a Herculean scheme to transport Colorado River water to the metropolitan areas in the center of the state.[31] In frustration, Arizona filed suit in the Supreme Court, claiming the 2.8 million acre-feet/year apportionment suggested by Congress in the BCPA as Arizona's allocation, and requesting a judicial apportionment among the three Lower Basin states.[32] After an extremely protracted and complex trial, the Court announced its stunning decision in 1963. In *Arizona v. California*, the Court declared that the allocation of Lower Basin waters proposed by Congress in the BCPA was actually a "complete statutory apportionment intended to put an end to the long-standing dispute over Colorado River waters."[33]

Arizona's euphoria over its allocation was soon tempered, however, by the enactment in 1968 of the Colorado River Basin Project Act (CRBPA) that finally authorized the CAP.[34] In exchange for the support of California's large congressional delegation for the Act, Arizona reluctantly conceded to a provision giving California's 4.4 million acre-feet/year and Nevada's .3 million acre-feet/year allocations priority over CAP water in times of shortage.[35]

The Colorado River Basin states tend to consider the Law of the River as settled and historically have not welcomed new concepts such as interstate water marketing and transfers.[36] However, developments impacting supply and demand for Colorado River water that were unforeseen by the drafters of the

29. Act of Apr. 11, 1956, Pub. L. No. 84–485, 70 Stat. 105 (codified at 43 U.S.C. §§ 620–620o (1988)).

30. See *infra* notes 101–09 and accompanying text for a discussion of the San Juan–Chama Project and the Navajo Indian Irrigation Project.

31. *See* HUNDLEY, *supra* note 8, at 300.

32. Arizona v. California, 373 U.S. 546 (1963), *decree entered*, 376 U.S. 340 (1964), *decree amended*, 383 U.S. 268 (1966), *supplemental decree entered*, 439 U.S. 419 (1979), *supplemental opinion*, 460 U.S. 605 (1983), *second supplemental decree entered*, 466 U.S. 144 (1984). Unless otherwise specified, references in this Note to *Arizona v. California* are to the 1963 decision.

33. 373 U.S. at 560. The decision came as a surprise primarily because the Court had never before interpreted an act of Congress to apportion interstate waters. Hundley, *supra* note 10, at 31.

34. Act of Sept. 30, 1968, Pub. L. No. 90–537, 82 Stat. 885 (codified at scattered sections, 43 U.S.C. §§ 616–620(k), § 1501 (1988)).

35. Hundley, *supra* note 10, at 36; Pub. L. No. 90–537, tit. III, § 301(b), 82 Stat. at 888. The price for the support of the Upper Basin states was that the Act also provide for the construction of a number of Upper Basin projects, including one expected in part to serve the Colorado Ute tribes: the Animas–La Plata Project. Hundley, *supra* note 10, at 36. See *infra* notes 179–89 for a discussion of the Animas–La Plata Project.

36. *See* David E. Lindgren, *The Colorado River: Are New Approaches Possible Now that the Reality of Overallocation is Here?*, ROCKY MTN. MIN. L. INST. 25–1, 25–13 (1992).

CRC have exerted unexpected pressures on the Law of the River.[37] In addition to the serious overestimation of the flow of the river,[38] the CRC did not anticipate the burgeoning increase in demand for municipal and industrial water,[39] the disproportionately high demand of the Lower Basin relative to that of the Upper Basin,[40] the lack of storage capacity in the Upper Basin,[41] or the possibility that Lower Basin demand would so rapidly outgrow its allocation.[42] Overallocation in the Lower Basin is due entirely to diversions to southern California, which have exceeded the state's annual allotment of 4.4 million acre-feet by more than 800,000 acre-feet.[43]

These increasing pressures on the Law of the River seem to predestine the accommodation of new approaches, but change will not come easily. For example, in 1987 the states of Arizona, California, and Nevada adamantly opposed provisions for the off-reservation leasing of tribal water in the proposed Colorado Ute Settlement.[44] One basis for the Lower Basin states' opposition was that if a tribe were to market water, a downstream diverter who had been using the water at no charge could lose its source.[45] The vital interest of downstream beneficiaries in unused Upper Basin waters was put succinctly by one of the beneficiaries, the Metropolitan Water District of Southern California: "Metropolitan is heavily dependent upon...the 'Law of the River' to obtain water and to obtain it without cost."[46]

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37. *See id.* at 25–9. See also *infra* notes 273–91 and accompanying text commenting on recent proposals for water marketing that would require significant amendment of the Law of the River.

38. Stockton & Jacoby, *supra* note 10.

39. Professor Getches has described the Law of the River as "bristl[ing] with preferences for agriculture." Getches, *supra* note 17, at 427. Yet metropolitan centers outside the drainage basin of the Colorado, such as Los Angeles, San Diego, Denver, and Salt Lake City, rely heavily on the River for municipal and industrial water uses. Getches, *supra* note 17, at 428.

40. Recent data indicates that consumption in the Upper Basin states is less than one-third that of the Lower Basin. Lindgren, *supra* note 36, at 25–11.

41. Full development of Upper Basin water depends on storage facilities, yet economic and environmental conditions make it extremely unlikely that significant storage facilities will be constructed within the Upper Basin. *See* Getches, *supra* note 17, at 448–54.

42. *See* Lindgren, *supra* note 36, at 25–10 to –12.

43. *See* Lindgren, *supra* note 36, at 25–12, n.30.

44. *See* Lindgren, *supra* note 36, at 25–13 to –14.

45. *See* Lindgren, *supra* note 36, at 25–13 to –14.

46. Lindgren, *supra* note 36, at 25–14 (quoting a September 1984 memorandum from Metropolitan's General Manager and General Counsel). *See also* John B. Weldon, Jr., *Non-Indian Water Users' Goals: More is Better, All is Best, in* INDIAN WATER IN THE NEW WEST 83 (Thomas R. McGuire et al. eds., 1993) (asserting that:

> [m]any non-Indian appropriators are strongly opposed to the idea of having to pay for water that they have used freely for generations, particularly where, absent federal funding, the tribes will be unable to build the water storage and delivery systems that would allow them to fully utilize their water rights. Rather than participating in water marketing arrangements with the tribes, many non-Indian appropriators would prefer to use political clout in Congress to prevent the tribes from obtaining the funds necessary to exercise their reserved rights).

III. THE DEVELOPMENT OF INDIAN RESERVED RIGHTS ON THE SAN JUAN RIVER

A. Winters *Doctrine Rights*

Any discussion of Indian reserved water rights must begin with the landmark Supreme Court decision of *Winters v. United States*.[47] In *Winters*, the United States government brought suit on behalf of the Indians of the Fort Belknap Reservation against upstream homesteaders who had established water rights under state law to the waters of the Milk River in Montana.[48] The homesteaders' upstream diversions left insufficient flow for the Indians to irrigate their crops.[49] The Court held that the treaty setting aside the reservation had implied a concurrent reservation of rights to enough water to fulfill the purposes of the reservation.[50] In so holding, the Court found it inconceivable that the Fort Belknap Indians, much less the federal government, could have intended to negotiate a treaty under which the Indians would cede vast lands to the government without reserving the water rights necessary to make the retained lands productive.[51] The Court's decision in *Winters* gave rise to what has come to be known as the *Winters* Doctrine and was the source of the first federal reserved water right.[52]

Winters rights obtain a priority date of the date the reservation was created[53] and are not subject to forfeiture or abandonment for non-use.[54] This means that the *Winters* right is superior to any other water right with a subsequent priority date, regardless of whether the *Winters* right has ever been exercised.[55] Still, the true impact of *Winters* was not felt for more than fifty

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47. 207 U.S. 564 (1908).
48. *Id.* at 565–69.
49. *Id.* at 567.
50. *Id.* at 576.
51. The Court reasoned that "[t]he Indians had command of the lands and the waters—command of all their beneficial use, whether kept for hunting, 'and grazing roving herds of stock,' or turned to agriculture and the art of civilization. Did they give up all this? Did they reduce the area of their occupation and give up their water which made it valuable or adequate?" *Id.*
52. *See* Michael R. Moore, *Native American Water Rights: Efficiency and Fairness*, 29 NAT. RESOURCES J. 763, 765–66 (1989). *See generally* Harold A. Ranquist, *The* Winters *Doctrine and How It Grew: Federal Reservation of Rights to the Use of Water*, 1975 B.Y.U. L. REV. 639 (detailing the genesis of the *Winters* Doctrine). Courts have also recognized implied water rights for other reservations of federal land, such as national monuments, Cappaert v. United States, 426 U.S. 128 (1976), national forests, United States v. New Mexico, 438 U.S. 696 (1978), and federal wildlife refuges, Arizona v. California, 373 U.S. 546 (1963). See also *infra* notes 64–67 and accompanying text for a discussion of other federal reserved water rights.
53. Indian reserved water rights obtain a priority date of either the date the Indian reservations were created, *Winters*, 207 U.S. at 577; Arizona v. California, 373 U.S. 546, 600 (1963), or the date the United States promised to create a reservation, State *ex rel.* Martinez v. Lewis, 861 P.2d 235, 244 (N.M. Ct. App. 1993).
54. In *Winters*, the Supreme Court determined that reserved Indian water rights were exempted "from appropriation under the state laws...." 207 U.S. at 577. *See also* FELIX S. COHEN, HANDBOOK OF FEDERAL INDIAN LAW 578–81 (2d ed. 1982) (summarizing and analyzing the Court's opinion in *Winters*).
55. For example, if an Indian reservation were created in 1870, water impliedly reserved under the *Winters* Doctrine would have a priority senior to that of a downstream non-Indian farmer who had diverted irrigation water each year since 1930, even though the Indian tribe had not put its water to use on the reservation until 1990.

years, primarily because Indian tribes failed to assert their rights.[56] Moreover, the *Winters* Court had neglected to establish a means by which to quantify the Indian reserved water right.[57]

In 1963, however, the Supreme Court announced such a measure in *Arizona v. California*.[58] The Court determined that the standard by which to quantify Indian reserved water rights is "practicably irrigable acreage" (PIA), a measure intended to account for both present and future water needs of the tribes.[59] In applying the PIA standard, courts may consider evidence on such variables as soil quality and topography in order to find that land is irrigable, that is, susceptible to sustaining agricultural activity without long-term deterioration.[60]

The seemingly expansive nature of the PIA standard has drawn sharp criticism from parties sympathetic to holders of competing water rights based on the doctrine of prior appropriation and obtained under state laws.[61] The

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56. NATIONAL WATER COMMISSION, WATER POLICIES FOR THE FUTURE; FINAL REPORT TO THE PRESIDENT AND TO THE CONGRESS OF THE UNITED STATES 474–75 (1973) [hereinafter WATER COMMISSION]. See *infra* notes 92–96 and accompanying text, explaining that Indian tribes failed to assert their *Winters* rights primarily because they lacked either the substantial economic resources needed to develop reclamation projects or the support of the federal government, whose interest was focused instead on the reclamation needs of the tribes' non-Indian neighbors.

57. *See* Note, *Indian Reserved Water Rights: The* Winters *of Our Discontent*, 88 YALE L.J. 1689, 1695 (1979).

58. 373 U.S. 546 (1963).

59. *Id.* at 600–01.

60. *See* DAVID H. GETCHES, WATER LAW IN A NUTSHELL 332 (2d ed. 1990). For a comprehensive look at the application of the PIA test, see Steven J. Shupe, *Identifying Practicably Irrigable Acreage (PIA), in* INDIAN WATER 1985, at 103 (Christine L. Miklas & Steven J. Shupe eds., 1986).

61. *See, e.g.*, Alvin H. Shrago, *Emerging Indian Water Rights: An Analysis of Recent Judicial and Legislative Developments*, 26 ROCKY MTN. MIN. L. INST. 1105, 1116 (1980) (asserting that, in light of the existence of vast Indian lands located in arid regions, application of the PIA test is unfair and impractical); Susan M. Campbell, Note, *A Proposal for the Quantification of Reserved Indian Water Rights*, 74 COLUM. L. REV. 1299 (1974) (recommending a quantification standard based largely on present uses and needs, and allowing non-agricultural application of reserved water rights); Belinda K. Orem, Comment, *Paleface, Redskin, and the Great White Chiefs in Washington: Drawing the Battle Lines Over Western Water Rights*, 17 SAN DIEGO L. REV. 449 (1980) (arguing that Congress should generally limit Indian reserved water rights to that amount necessary to meet reasonable present needs). *See also* Jana L. Walker & Susan M. Williams, *Indian Reserved Water Rights*, 5 NAT. RESOURCES & ENV'T 4, 6 (1991) (discussing the nature of resentment against Indian reserved water rights:

> The controversy over tribal water rights is fueled by the expansive nature of tribal rights, the relative lack of restrictions on how tribes use their reserved water awards, and a tribal priority date typically older, and thus more valuable, than other rights in a basin. These unique factors have enormous potential to disrupt western water use established under state laws that generally impose substantial restrictions on the right and award water on a time-priority basis. Because of the fear that tribes will exercise their water rights in a manner that will disrupt rather than enhance western development, states and affected parties have taken judicial and political aim at the size and scope of Indian reserved water rights.).

But cf. Reid P. Chambers & John E. Echohawk, *Implementing The* Winters *Doctrine of Indian Reserved Water Rights: Producing Indian Water and Economic Development Without Injuring Non-Indian Water Users?*, 27 GONZ. L. REV. 447, 467–68 (1991/92) (explaining that recent increases in Indian use of reserved water rights have not generally impacted non-Indians because the expanded Indian uses are facilitated by new water storage and more efficient water management, such as water exchanges, transfers, and conservation practices); Richard B. Collins, *The Future Course of the* Winters *Doctrine*, 56 U. COLO. L. REV. 481, 482 (1985) (declaring that "[t]here have been extravagant claims of the 'threat' posed by Indian water

doctrine of prior appropriation grants senior rights to those who first put water to a beneficial use.[62] Prior appropriation is a utilitarian concept that assumes that private use of water is preferable to public use, that water rights endure only as long as the water is put to beneficial use, and that a stream's entire flow may be diverted to satisfy claims on the water.[63]

While the Supreme Court has announced a concrete quantification measure for Indian reserved water rights, it has not supplied a similar measure for reservations of non-Indian federal land. In defining the federal reserved right for the protection of the endangered desert pupfish in Devil's Hole National Monument, the Court noted that the quantity of water reserved must be "only that amount of water necessary to fulfill the purpose of the reservation, no more."[64] In *United States v. New Mexico*,[65] the Court considered the scope of the reserved water right for a national forest. It held that the national forest's reserved right was implied only "to fulfill the very purposes for which a federal reservation is created...."[66] The Supreme Court has not addressed whether the primary purpose analysis adopted in *United States v. New Mexico* applies to Indian reservations.[67]

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claims, but actual conflict has been almost entirely a war of words, paper, and lawyers. Indian calls are not shutting anyone's headgates." (citation omitted)).

62. *See* GETCHES, *supra* note 60, at 75. Beneficial use is defined by state law. GETCHES, *supra* note 60, at 76.

63. A. Dan Tarlock, *Western Water Rights and the Act, in* BALANCING ON THE BRINK OF EXTINCTION 167, 170–72 (Kathryn Kohm ed., 1991).

64. Cappaert v. United States, 426 U.S. 128, 141 (1976).

65. 438 U.S. 696 (1978).

66. *Id.* at 702. The Supreme Court examined the Organic Act establishing the United States Forest Service and identified two primary purposes: to maintain a timber supply, and to protect watersheds. *Id.* at 707. The Court expressly rejected the United States' claim that the reserved rights doctrine extended to in-stream flow maintenance for wildlife, recreation, aesthetics and stockwatering. *Id.* at 705. For these "secondary" purposes, the Court held that the federal government could only obtain a water right through appropriation under state law. *Id.* at 701, 715.

67. David H. Getches, *Indian Water Rights Conflicts in Perspective, in* INDIAN WATER IN THE NEW WEST, *supra* note 46, at 24–25 n.18. In *United States v. Adair*, the Ninth Circuit expressly stated that *New Mexico* and *Cappaert* are "not directly applicable to *Winters* doctrine rights...." 723 F.2d 1394, 1408 (9th. Cir. 1983). In support of this conclusion, the court quoted WILLIAM CANBY, AMERICAN INDIAN LAW 245–46 (1981): "'[w]hile the purpose for which the federal government reserves other types of lands may be strictly construed, the purposes of Indian reservations are necessarily entitled to broader interpretation if the goal of Indian self-sufficiency is to be attained.'" 723 F.2d at 1408 n.13 (citation omitted). Additionally, the Montana Supreme Court has expressly rejected application of the cramped holding of *United States v. New Mexico* to Indian reservations, reasoning that while "[t]here are no special canons of construction for interpreting the documents that create federal reserved water rights...[t]he purposes of Indian reserved rights...are given broader interpretation in order to further the federal goal of Indian self-sufficiency." State v. Confederated Salish & Kootenai Tribes, 712 P.2d 754, 767–68 (Mont. 1985).

In contrast, attempting to narrow the scope of Indian reserved rights, state interests have argued that quantification of *Winters* rights must be subject to a "sensitivity" analysis. *See* Brief for Petitioner at 35–39, Wyoming v. United States, 492 U.S. 406 (1989) (No. 88–309). Derived from Justice Powell's dissent in United States v. New Mexico, 438 U.S. at 718, this "sensitivity doctrine" advanced by the states would require courts to "consider whether the right is express or implied, whether there is evidence of Congress' traditional intent to defer to state water law, whether the right sought goes beyond the minimal needs of the reservation, and whether quantification will damage water-needy state and private appropriators." Brief for Petitioner at 37, Wyoming v. United States, 492 U.S. 406 (1989) (No. 88–309). One commentator recently concluded that the federal government's fiduciary duty to uphold tribal sovereignty is inconsistent with the sensitivity doctrine. Sylvia F. Liu, Comment, *American*

The Court has, however, reaffirmed without opinion the validity of the PIA standard to quantify Indian reserved rights.[68] In 1989, by an evenly split vote, the Court refused to upset the standard despite the fact that the Court was then "one of the most western of any Court in the period" as well as "one of the most politically oriented panels" of the twentieth century.[69] Justice O'Connor, who ultimately did not take part in the decision, nevertheless drafted an unpublished opinion in which she suggested a modified approach to the PIA standard, emphasizing that an analysis of practicably irrigable acreage should be economically realistic.[70]

B. The Federal Trust Responsibility to Indians

The United States owes a trust responsibility to Indian tribes. Reservation lands are held in trust by the federal government, which must act in a fiduciary manner to protect the interests of its trust beneficiaries.[71] This special relationship between the United States and sovereign Indian tribes was outlined in the landmark Supreme Court cases of *Cherokee Nation v. Georgia*[72] and *Worcester v. Georgia.*[73] The *Cherokee Nation* Court described the relationship between the United States and the Cherokee Nation as that of guardian and ward,[74] while in *Worcester* the Court emphasized the status of tribes as that of sovereign nations protected by the might of the national government.[75] Thus, courts have held, the federal government's position as a guardian means that it must prefer Indian interests when balanced with other federal interests.[76]

Indian Reserved Water Rights: The Federal Obligation to Protect Tribal Water Resources and Tribal Autonomy, 25 ENVTL. L. 425 (1995).

68. Wyoming v. United States, 492 U.S. 406 (1989) (per curiam).

69. Getches, *supra* note 67, at 18.

70. Justice O'Connor's modified standard would have subjected Indian irrigable acreage to "a 'practical' assessment—a determination apart from theoretical economic and engineering feasibility—of the *reasonable likelihood* that future irrigation projects, necessary to enable lands which have never been irrigated to obtain water, will *actually* be built." Wyoming v. United States, Opinion, 2nd Draft at 17 (recirculated June 12, 1989) (O'Connor, J.) (emphasis in original) (reproduced from the Collections of the Manuscript Division, Library of Congress).

71. COHEN, *supra* note 54, at 225.

72. 30 U.S. (5 Pet.) 1 (1831).

73. 31 U.S. (6 Pet.) 515 (1832).

74. 30 U.S. (5 Pet.) at 17. Chief Justice Marshall termed American Indian tribes as "domestic dependent nations" that "look to our government for protection; rely upon its kindness and its power; appeal to it for relief to their wants...." *Id.* Legal scholars have viewed the federal government's role in establishing the trust relationship as involving something less than "kindness." For example, Professor Robert A. Williams has argued convincingly that the Court's recognition of the trust relationship was essentially an outgrowth of archaic legal theories of conquest developed in Medieval Europe. *See generally* Robert A. Williams, Jr., *The Algebra of Federal Indian Law: The Hard Trail of Decolonizing and Americanizing the White Man's Indian Jurisprudence*, 1986 WIS. L. REV. 219 (concluding that the ultimate goal of the trust relationship in the 1830's was total assimilation and eradication of Native American cultures).

75. Tribes were characterized by the Court as "nation[s] claiming and receiving the protection of one more powerful: not that of individuals abandoning their national character, and submitting as subjects to the laws of a master." 31 U.S. (6 Pet.) at 555.

76. *See* Pyramid Lake Paiute Tribe of Indians v. Morton, 354 F. Supp. 252, 256–57 (D. D.C. 1972), *rev'd on other grounds*, 499 F.2d 1095 (D.C. Cir. 1974), *cert. denied*, 420 U.S. 962 (1975). The court denounced the Secretary of the Interior's unsubstantiated "judgment call" implementing a federal regulation affecting water claimed by both a Nevada irrigation district and the Pyramid Lake Tribe. *Id.* at 256. Further, the court asserted that the federal government, "...acting through the Secretary of the Interior, 'has charged itself with moral obligations of the highest responsibility and trust. Its conduct...should therefore be judged by the most exacting

Although the United States Department of the Interior maintains the Bureau of Indian Affairs (BIA) to deal exclusively with Indian trust issues, the federal trust to Indians is owed by all federal agencies.[77] Expressly recognizing this obligation, the Department of the Interior reaffirmed the fiduciary responsibility of all Department agencies in November 1993.[78] The Bureau of Reclamation and the United States Fish and Wildlife Service (USFWS), which play critical roles in development of water rights of western Indian tribes, are agencies within the Department of the Interior. Both are trustees of the tribes.

C. Reclamation of the Non-Indian West—Indian Lands Remain Dry

Between the end of the American Civil War and the turn of the century, the American West was transformed from a vast wilderness not unlike "modern interior Alaska, after removing Fairbanks,"[79] to a land dotted with nearly 100 million acres of homesteaded land.[80] To entice its citizens to settle arid and semi-arid western lands, the federal government granted larger homesteads on dry lands if the patentee could show that the land had been irrigated.[81] When private efforts to construct the large-scale irrigation projects necessary to make the dry lands productive did not materialize, the federal government decided to enter the water business.[82]

Under the Reclamation Act of 1902,[83] the federal government constructed vast irrigation projects for the benefit of non-Indian western farmers.[84] The Reclamation Act contemplated that the farmers would repay the costs of construction over time, but pay no interest.[85] By 1974, the Bureau of Reclamation, the federal agency established within the Department of the

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fiduciary standards.'...Undertakings with the Indians are to be liberally construed to the benefit of the Indians, and the duty of the Secretary to do so is particularly apparent." *Id.* (quoting Seminole Nation v. United States, 316 U.S. 286, 297 (1942)). *But cf.* Nevada v. United States, 463 U.S. 110 (1983) (where the Court declined to reopen a 1944 decree that quantified water rights for the Pyramid Lake Paiute Tribe, among others). The Court reasoned that the Secretary of the Interior was not in every instance bound by "the fastidious standards of a private fiduciary" when confronted by conflicting duties to Indians and to non-Indians, since "[t]he Government does not 'compromise' its obligation to one interest that Congress obliges it to represent by the mere fact that it simultaneously performs another task for another interest that Congress has obligated it by statute to do." *Id.* at 128.

77. *See* COHEN, *supra* note 54, at 225.

78. Secretary of the Interior Bruce Babbitt, Secretarial Order No. 3175 (November 8, 1993) [hereinafter Secretarial Order] (requiring all Department of the Interior agencies to examine how proposed agency actions might impact tribes and mandating written explanations of how the agencies' actions will be consistent with the Department's trust responsibilities). The Ninth Circuit also declared as much in *Nance v. Environmental Protection Agency*, reasoning that "[i]t is fairly clear that *any* Federal government action is subject to the United States' fiduciary responsibilities toward the Indian tribes." 645 F.2d 701, 711 (9th Cir. 1981), *cert. denied*, 454 U.S. 1081 (1981).

79. REISNER, *supra* note 11, at 36.

80. *See* GEORGE C. COGGINS ET AL., FEDERAL PUBLIC LAND AND RESOURCES LAW 85 (3d ed. 1993).

81. *See, e.g.*, The Desert Lands Act of 1877, Act of Mar. 3, 1877, ch. 107, 19 Stat. 377 (1877) (codified as amended at 43 U.S.C. §§ 321–339 (1988)).

82. *See* COGGINS ET AL., *supra* note 80, at 103.

83. Ch. 1093, 32 Stat. 388 (codified in scattered sections of 43 U.S.C.).

84. JOSEPH L. SAX ET AL., LEGAL CONTROL OF WATER RESOURCES, CASES AND MATERIALS 620–21 (2d ed. 1991).

85. *Id.*

Interior to discharge the government's obligations under the Act, had spent $6 billion in completed reclamation projects.[86]

The Bureau's program to harness the Lower Colorado River spawned the mammoth Hoover and Glen Canyon Dams, each impounding roughly two times the river's annual flow.[87] Below Hoover Dam, Bureau of Reclamation projects have allowed southern California interests to siphon off millions of acre-feet of Colorado River water outside the Basin for municipal, industrial and agricultural uses.[88] Parker Dam allows the diversion of water to the metropolitan areas of coastal southern California via the Colorado River Aqueduct, and to interior Arizona via the Central Arizona Project.[89] Further downstream, the Imperial Dam facilitates the largest diversion of all: a whopping 2.5 million acre-feet/year of water that would otherwise flow into Mexico is instead transported through the All American Canal to the Imperial and Coachella Valleys in southern California.[90]

While the United States was disposing of arid federal lands and supplying much of these lands with subsidized water, it was simultaneously presiding over the homesteading and sale of lands formerly under Indian control.[91] And despite the fact that three-fourths of Native Americans residing on reservations live west of the hundredth meridian,[92] the same area reaping the benefits of the Bureau of Reclamation's largesse,[93] the water needs of Indian tribes were essentially ignored.[94] The dearth of reclamation projects for Indian tribes was

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86. Monique Shay, *Promises of a Viable Homeland, Reality of Selective Reclamation: A Study of the Relationship Between the* Winters *Doctrine and Federal Water Development in the Western United States*, 19 ECOL. L.Q. 547, 552 (1992).

87. Ed Marston, *Reworking the Colorado River Basin, in* WESTERN WATER MADE SIMPLE 199, 199 (Ed Marston ed., 1987). Hoover Dam created Lake Mead, a 35 million acre-feet playground for the residents of nearby Las Vegas, Nevada, while Glen Canyon Dam impounded 33 million acre-feet in Lake Powell, the photographers' mecca. *Id.*

88. *See* Eric L. Garner & Michelle Ouellette, *Future Shock? The Law of the Colorado River in the Twenty-First Century*, 27 ARIZ. ST. L.J. 469, 480 (1995). Of California's current use of Colorado River water, approximately 75% (3.85 million acre-feet/year) goes to agriculture, and 25% (1.2 million acre-feet annually) supplies municipal and industrial demand. *Id.*

89. Marston, *supra* note 87, at 199–200.

90. Ed Marston, *When Water Kingdoms Clash, in* WESTERN WATER MADE SIMPLE, *supra* note 87, at 36. The diversion through the All American Canal is no less than one-sixth of the river's annual flow. It has transformed a scorching desert with less than three inches of annual rainfall into a hugely productive farm belt. Marston, *supra* note 87, at 36.

91. Vast areas of Indian land were homesteaded by non-Indians under the General Allottment Act of 1887, also known as the Dawes Act (ch. 119, 24 Stat. 388 (1887), codified in scattered sections of 25 U.S.C.). Congress' goal in enforcing the Dawes Act was to phase out the reservation system by assimilating Native peoples into mainstream American society. SAX ET AL., *supra* note 84, at 886. The Dawes Act termed lands not allotted to individual Indians as "surplus" and therefore open for homesteading and purchase. SAX ET AL., *supra* note 84, at 886. As a result, of 140 million acres owned by Indian tribes in 1887, all but approximately 50 million acres had been conveyed to non-Indians by the 1930's. Colville Confederated Tribes v. Walton, 647 F.2d 42, 50 n.14 (9th Cir. 1981).

92. *See* R. DOUGLAS HURT, INDIAN AGRICULTURE IN AMERICA: PREHISTORY TO THE PRESENT 92 (1987).

93. DANIEL MCCOOL, COMMAND OF THE WATERS: IRON TRIANGLES, FEDERAL WATER DEVELOPMENT, AND INDIAN WATER 62 (1987).

94. *See* Moore, *supra* note 52, at 771–73. The failure of the Department of the Interior to develop reclamation projects as trustee for Indian tribes even after the landmark Supreme Court decision in Winters v. United States, 207 U.S. 564 (1908), was characterized by the National Water Commission in a widely-cited but evocative statement:

largely a reflection of political reality: Indians simply lacked the necessary influence in Congress.[95] While the Bureau of Indian Affairs has constructed a few Indian water projects, the majority of these have not been completed due to a lack of funding.[96]

D. San Juan River Indian Water Agreements and Reclamation Projects

In the years following the Court's startling decision on the quantification of reserved Indian water rights in *Arizona v. California,*[97] Indian tribes have seen a notable increase in development of tribal water projects.[98] In large part, this development has occurred, and will continue to occur, pursuant to negotiated settlements of water rights between states and tribes.[99] Such settlements generally result when Indian tribes agree to limit their *Winters* "paper" water rights in exchange for a guaranteed volume of "wet water."[100]

1. Navajo Indian Irrigation Project

The experience of the Navajo Nation in the development of the Navajo Indian Irrigation Project (NIIP) is illustrative of the "lengths tribes have been forced to go" to develop their water.[101] Beginning in the late 1940's, the Navajo Nation began lobbying for a large-scale irrigation project utilizing its senior water rights on the San Juan River in New Mexico.[102] In turn, the state of New

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> Following *Winters*...the United States was pursuing a policy of encouraging the settlement of the West and the creation of family-sized farms on its arid lands. In retrospect, it can be seen that this policy was pursued with little or no regard for Indian water rights and the *Winters* doctrine. With the encouragement, or at least the cooperation, of the Secretary of the Interior—the very office entrusted with the protection of all Indian rights—many large irrigation projects were constructed on streams that flowed through or bordered Indian Reservations.... With few exceptions the projects were planned and built by the Federal Government without any attempt to define, let alone protect, prior rights that Indian tribes might have had in the waters used for the project.... In the history of the United States Government's treatment of Indian tribes, its failure to protect Indian water rights for use on the reservations it set aside for them is one of its sorrier chapters.

WATER COMMISSION, *supra* note 56, at 474–75 .

95. *See* Shay, *supra* note 86, at 559–60. "The BIA water projects were denied the funding which was lavished on non-Indian water projects." Shay, *supra* note 86, at 560. In the words of a former Assistant Commissioner of Indian Affairs, his most difficult task was "getting appropriations for Indian irrigation projects" when Congressional appropriations committees and Executive offices "could find dozens of reasons for denying money to the BIA for Indian irrigation projects, while endorsing gigantic sums to finance reclamation projects with much worse cost-benefit ratios in the districts of influential congressmen." MCCOOL, *supra* note 93, at 140 (quoting James Officer).

96. MCCOOL, *supra* note 93, at 125.

97. Until the Court's decision in *Arizona v. California*, Indian rights were generally ignored by western states. *See* A. Dan Tarlock, *One River, Three Sovereigns: Indian and Interstate Water Rights*, 22 LAND & WATER L. REV. 631, 649 (1987).

98. *See* Chambers & Echohawk, *supra* note 61, at 457.

99. *See* Chambers & Echohawk, *supra* note 61, at 457.

100. Shay, *supra* note 86, at 588.

101. Shay, *supra* note 86, at 561.

102. *See* Monroe E. Price & Gary D. Weatherford, *Indian Water Rights in Theory and Practice: Navajo Experience in the Colorado River Basin*, 40 L. & CONTEMP. PROBS. 97, 120 (1976). A portion of the original Navajo Reservation established by treaty between the Navajos and the United States in 1868 included a stretch of the San Juan River. *Id.*

Mexico urged Congress to approve of the project only if the Navajo Nation would agree to certain limitations on its *Winters* rights.[103] In order to make Congressional approval likely, the Navajos agreed to the limitations sought by the state.

The NIIP was finally approved in a 1962 dual authorization act[104] covering both the NIIP and the San Juan–Chama Project, a diversion project benefitting New Mexicans outside of the Colorado River system in the Rio Grande basin.[105] Consistent with the historical pattern of Western water development,[106] the non-Indian San Juan–Chama Project was completed ahead of schedule while NIIP, the tribal project, has now developed only slightly more than half of its intended irrigated acreage.[107] The NIIP Act was arguably not a negotiated settlement quantifying all of the Navajo's reserved rights to the San Juan River.[108] Rather, the legislative history of the Act suggests that its purpose was solely to quantify a portion of the Tribe's reserved water rights for purposes of allocation to the irrigation project.[109]

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103. *See* LLOYD BURTON, AMERICAN INDIAN WATER RIGHTS AND THE LIMITS OF LAW 31 (1991). Such limitations included an agreement not to assert its senior priority rights to approximately 110,000 acre-feet of San Juan River water annually. This 110,000 acre-feet/year of San Juan River water was to be dedicated to the San Juan–Chama Project, which diverts water out of the San Juan River and transports it via aqueduct into the Rio Grande River basin for use by the city of Albuquerque, New Mexico. *See* John A. Folk–Williams, *The Use of Negotiated Agreements to Resolve Water Disputes Involving Indian Rights*, 28 NAT. RESOURCES J. 63, 76–77 (1988); Daniel H. Israel, *Tribal Leasing of Colorado River Waters: Federal Policies and Regional Realities* 15–16 (1994) (presented during the ABA Section of Natural Resources, Energy, and Environmental Law, 12th Annual Water Law Conference, Feb. 10–11, 1994). The Navajo Nation further agreed to accept a guaranteed delivery of 508,000 acre-feet per year, Folk–Williams *supra* at 77, and capitulated to a water sharing arrangement in times of drought, Price & Weatherford, *supra* note 102, at 122–23. Without the limitation, the Navajo's reserved rights would have taken priority in times of shortage over all other uses holding a junior priority.

104. Act of June 13, 1962, Pub. L. No. 87–483, 76 Stat. 96, 43 U.S.C. §§ 615ii–zz (1988).

105. *See* Folk–Williams, *supra* note 103, at 76. *See generally* ELIZABETH CHECCHIO & BONNIE G. COLBY, INDIAN WATER RIGHTS: NEGOTIATING THE FUTURE 28 (1993) (contrasting the importance accorded the San Juan–Chama Project and "tepid" federal support for the NIIP).

106. *See* Shay, *supra* note 86, at 562–65.

107. *See* Israel, *supra* note 103, at 16. In 1974, after deciding that a less water-consumptive method of irrigation should be used, the Department of the Interior's Office of the Solicitor recommended that the Navajo allotment of water for NIIP be reduced from 508,000 acre-feet to 333,000 acre-feet annually. *See* Shay, *supra* note 86, at 561; Charles DuMars & Helen Ingram, *Congressional Quantification of Indian Reserved Water Rights: A Definitive Solution or a Mirage?*, 20 NAT. RESOURCES J. 17, 28–29 (1980). This recommendation seemed particularly egregious in light of the fact that non-Indian farmers in the area were using Navajo water at a much less efficient rate. *See* Shay, *supra* note 86, at 561. Commentators have declared that "the Interior Department had stolen 178,000 acre-feet from the Navajo even after the Navajo gave up claims to additional water." PETER WILEY & ROBERT GOTTLIEB, EMPIRES IN THE SUN, THE RISE OF THE AMERICAN WEST 235 (1982).

108. *See* DuMars & Ingram, *supra* note 107, at 28–29.

109. *See* Judith E. Jacobsen, *The Navajo Indian Irrigation Project and Quantification of Navajo* Winters *Rights*, 32 NAT. RESOURCES J. 825, 845–51 (1992). *But see* DuMars & Ingram, *supra* note 107, at 35–39 (listing the arguments for limiting the quantification of Navajo reserved rights to the NIIP allocation).

2. Jicarilla Apache and Colorado Ute Settlement Agreements

The Jicarilla Apache Tribe and the Colorado Ute tribes (the Southern Ute Indian Tribe and the Ute Mountain Ute Indian Tribe, collectively) have also reached settlements affecting their respective reserved rights to San Juan River water.[110] Pursuant to the 1992 Jicarilla Apache Tribe Water Rights Settlement Act,[111] the Jicarilla tribe received a commitment from the Secretary of the Interior to make available as much as 32,000 acre-feet annually of San Juan River water, as well as a development fund, in settlement of historic claims against the United States and others.[112]

A settlement agreement quantifying all water rights of the Colorado Ute Tribes was approved by Congress in 1988.[113] This settlement resolved outstanding water rights issues between the two tribes, the State of Colorado, the federal government, and non-Indian water users.[114] The Animas–La Plata Project (ALP), potentially the last of the major Bureau of Reclamation projects, was designed to serve water needs of the parties to the settlement. This project was "the foundation for the settlement, both physically and politically."[115] The settlement also guaranteed the Tribes economic development grants in excess of $60 million, additional water rights in other streams, and domestic water supply systems constructed by the State of Colorado.[116]

IV. THE ENDANGERED SPECIES ACT AND ITS APPLICATION

In the two decades since its enactment, the ESA[117] has developed into a surprisingly influential piece of legislation. Characterized variously as "the pitbull of federal environmental statutes,"[118] and an "environmental jewel,"[119] the avowed purpose of the ESA is to conserve threatened and endangered species and the habitat on which such species depend for survival.[120] The legislative history of the ESA clearly indicates that Congress meant to protect

110. These settlements have fully quantified each tribe's rights to the San Juan River. Elizabeth A. Rieke, *Emerging Issues of the Colorado River: Overview of Unresolved Issues* 3 (1994) (presented during the ABA Section of Natural Resources, Energy, and Environmental Law, 12th Annual Water Law Conference, Feb. 10-11, 1994).

111. Pub. L. No. 102–441, 106 Stat. 2237 (1992).

112. *See* Israel, *supra* note 103, at 16.

113. Colorado Ute Indian Water Rights Settlement Act of 1988, Pub. L. No. 100–585, 102 Stat. 2973 (1988).

114. *See* Scott B. McElroy, *Implementing Settlements: A Case Study of the Colorado Ute Water Rights Settlement* 3 (1994) (presented during the Indian Water Rights Conference, Stan. L. Sch., Sept. 9–10, 1994).

115. *Id.* at 2. The ALP involves off-stream storage of waters from the Animas River for use in both the Animas and the La Plata basins, two contiguous tributaries of the San Juan River in southwestern Colorado and northwestern New Mexico. *Id.*

116. *Id.* at 3.

117. Pub. L. No. 93–205, 87 Stat. 884 (1973) (codified as amended at 16 U.S.C. §§ 1531–1544 (1988 & Supp. 1994)).

118. Robert D. Thornton, *Searching for Consensus and Predictability: Habitat Conservation Planning under the Endangered Species Act of 1973*, 21 ENVTL. L. 605, 605 (1991) (quoting an address by Donald Barry, Majority Counsel, House of Representatives Comm. on Merchant Marine and Fisheries, ABA Section on Natural Resources, Energy and Environmental Law Workshop on Endangered Species (Apr. 6, 1990)).

119. Elizabeth A. Foley, *The Tarnishing of an Environmental Jewel: The Endangered Species Act and the Northern Spotted Owl*, 8 J. LAND USE & ENVTL. L. 253, 253 (1992).

120. 16 U.S.C. § 1531(b).

"'charismatic megafauna'"[121] species such as bald eagles, whales, and grizzly bears, and intended to do so without regard to monetary cost.[122] Whether Congress also anticipated the ESA's tremendous impact on land and water use is less clear.[123]

The ESA owes its vitality to the Supreme Court's decision in *Tennessee Valley Authority v. Hill* (*TVA*),[124] the seminal endangered species case. *TVA* pitted the survival of the diminutive snail darter[125] against the powerful interests supporting completion of the Tellico Dam on the Little Tennessee River.[126] After examining the "language, history, and structure" of the ESA, the Court held that "Congress intended endangered species to be afforded *the highest of priorities*."[127] Despite subsequent controversy over the *TVA* decision and numerous amendments to the Act, the ESA's fundamental protections have so far remained intact.[128] Three distinct mechanisms under the ESA afford protection to endangered species: listing of a species, agency consultation requirements, and the prohibition against takings.[129]

A. Listing of An Endangered Species

The ESA requires the Secretary[130] to determine whether any species is threatened or endangered.[131] The Secretary's decision to list a species as

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121. *See* John C. Kunich, *The Fallacy of Deathbed Conservation Under the Endangered Species Act*, 24 ENVTL. L. 501, 554 (1994) (suggesting that many less appealing, and thus overlooked, endangered species are actually more "essential").

122. *See* George C. Coggins, *An Ivory Tower Perspective on Endangered Species Law*, 8 NAT. RESOURCES & ENV'T 3, 3 (1993).

123. *Id.*

124. 437 U.S. 153 (1978).

125. The snail darter is a three-inch long fish of the perch species; it has no commercial value. *Id.* at 158.

126. The Tellico Dam was constructed by the Tennessee Valley Authority for electric power generation, flood control, shoreline development, and recreational purposes. *Id.* at 157. At the time of the Court's decision, the dam was "virtually completed and...essentially ready for operation." *Id.* at 157–58.

127. *Id.* at 174 (emphasis added). That priority, the Court concluded, was superior to the "'primary missions' of federal agencies." *Id.* at 185. The ESA's protection extends to the entire biological community, including animals, fish, insects, and plant life. 16 U.S.C. §§ 1532(6), (8), (16).

128. *See* James H. Bolin, *Of Razorbacks and Reservoirs: The Endangered Species Act's Protection of Endangered Colorado River Basin Fish*, 11 PACE ENVTL. L. REV. 35, 43 (1993). After *TVA*, the ESA was amended to allow the approval of exemptions from the Act's requirements by a Cabinet-level committee, facetiously termed the "God Squad." *Id.* As of 1992, the committee had voted on only three cases after the *TVA* decision, one of which was the Tellico Dam project. *See* Karl Gleaves & Kath Wellman, *Economics and the Endangered Species Act*, 13 PUB. LAND L. REV. 150, 157 (1992). The completion of the Tellico Dam was ultimately authorized by legislation. *Id.*

129. *See* 16 U.S.C. §§ 1533, 1536, 1538, respectively.

130. "Secretary" refers to the Secretary of the Interior, 16 U.S.C. § 1533(a)(1) (1988), except when the species at peril is a marine animal, in which case the ESA delegates the Secretary of Commerce to act. 16 U.S.C. § 1533(a)(2).

131. The Secretary's decision may be based on the existence of any of the following factors: (1) the present or threatened destruction, modification, or curtailment of the species' habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; or (5) other natural or man-made factors affecting its continued existence. 16 U.S.C. § 1533(a)(1)(A)–(E). A species is "threatened" if it is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. 16 U.S.C. § 1532(20). An

threatened or endangered must be made on the best scientific and commercial data available,[132] and may not be influenced by economic considerations.[133] If a species is listed as threatened or endangered, the Secretary has the duty to concurrently designate a critical habitat necessary for that species' survival.[134] The distinction between a decision to list and a decision to designate critical habitat is important. Although the Secretary is prohibited from taking into consideration economic factors in deciding whether to list a species, under section 1533 she may decide not to designate critical habitat after finding that such designation will cause detrimental economic impacts, unless failure to designate would lead to the species' extinction.[135]

B. The Consultation Process

Section 7 of the ESA contains the most potent protections under the Act,[136] and has been the primary source of conflict arising under it.[137] Section 7(a)(2) requires that each federal agency must make sure that "any action authorized, funded, or carried out by such agency...is not likely to jeopardize the continued existence..." of an endangered species, and further, must not "result in the destruction or adverse modification of [critical] habitat of such species...."[138] In order to determine whether federal agency action falls under the prohibitions of section 7(a)(2), the agency involved must "consult" with the U.S. Fish and Wildlife Service (USFWS).[139]

"endangered" species is one that is in danger of extinction throughout all or a significant portion of its range. 16 U.S.C. § 1532(6).

132. 16 U.S.C. § 1533(b)(1)(A).

133. Congress expressly stated that "economic considerations have no relevance to determinations regarding the status of a species...." Conference Report, H.R. REP. NO. 835, 97th Cong., 2d Sess. 20 (1982), *reprinted in* 1982 U.S.C.C.A.N. 2807, 2820 (West 1983).

134. 16 U.S.C. § 1533(a)(3)(A). Critical habitat is defined under the Act as:

> (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 1533 of this title, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and
>
> (ii) specific areas outside the geographic area occupied by the species at the time it is listed in accordance with the provisions of section 1533 of this title, upon a determination by the Secretary that such areas are essential for the conservation of the species.

16 U.S.C. § 1532(5)(A). However, § 1532 places an express limitation on the geographic extent of the critical habitat by stating that such habitat "shall not include the entire geographical area which can be occupied by the threatened or endangered species." 16 U.S.C. § 1532(5)(C). After considering "the best scientific data available" as well as potential economic and other relevant impacts, the Secretary may decide not to designate an area as critical habitat, as such designation might have the undesired effect of tipping off collectors to the location of endangered species. *See* Bolin, *supra* note 128, at 44.

135. 16 U.S.C. § 1533(b)(2).

136. *See* A. Dan Tarlock, *The Endangered Species Act and Western Water Rights*, 20 LAND & WATER L. REV. 1, 8 (1985) (describing § 7 as "the heart of the Act's species protection scheme").

137. *See* Gail L. Achterman, *Reflections on Owls, Salmon, and Suckers: Current Developments Under the Endangered Species Act*, 38 ROCKY MTN. MIN. L. INST. 5-1, 5-13 (1992) (reporting that most litigation "arising under the Act deal[s] with the obligations of federal agencies under section 7").

138. 16 U.S.C. § 1536(a)(2).

139. *See* 50 C.F.R. § 402.01(b) (1994) (delegating responsibility for administering the Act to the USFWS and the National Marine Fisheries Service (NMFS), depending on the species involved); 50 C.F.R. § 402.14(a) (requiring federal agencies to consult with the

A consultation begins when the federal agency submits to the USFWS scientific and commercial data upon which the USFWS may base a decision relating to potential violation of section 7(a)(2).[140] Upon review of the data, the USFWS issues a biological opinion assessing the impact of the proposed project on the endangered species.[141] The biological opinion will reach one of three possible conclusions. The USFWS may issue a "no-jeopardy" opinion, signifying a finding that the proposed project is not expected to jeopardize the endangered species or adversely modify the species' critical habitat.[142] If the USFWS concludes that the proposed action will jeopardize the continued existence of an endangered species or adversely modify critical habitat, it will issue either a naked "jeopardy biological opinion" or a "jeopardy biological opinion" with "reasonable and prudent alternatives."[143] Once the USFWS issues a biological opinion, however, the federal agency has the final decision as to whether to proceed with the project.[144]

If no reasonable and prudent alternatives exist to save the listed species, the federal agency may not take the offending action unless it is given an exemption from the requirements of the Act.[145] Such an exemption may only be obtained through the Endangered Species Committee.[146] Significantly, the escape clause is seldom used and even when resorted to has not afforded substantial relief.[147]

C. Prohibition Against Takings

Section 9 of the ESA provides an additional safeguard for species at risk, making it unlawful for any agency or any person to "take" an endangered species on private or public land.[148] The definition for "take" under the ESA is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."[149] The Supreme Court recently settled conflicting rulings of federal appeals courts on the takings issue by affirming that "harm" in the definition of a taking under the ESA does include any actions resulting in potentially deleterious effects on the habitat of listed species.[150]

"Director"); 50 C.F.R. § 402.02 (defining "Director" as the USFWS regional director, or his authorized representative, for the region where the action is contemplated).

140. 50 C.F.R. § 402.14(c) (1994).

141. 50 C.F.R. § 402.14(g)(4) (1994).

142. 50 C.F.R. § 402.14(h)(3) (1994).

143. *Id.*

144. 50 C.F.R. § 402.15 (1994). If after consulting with the USFWS the federal agency decides that it cannot comply with the § 7(a)(2) requirements, the agency may seek an exemption. *Id.*

145. 16 U.S.C. § 1536(e)–(n).

146. *Id. See supra* note 128.

147. Achterman, *supra* note 137, at 5–23.

148. The prohibitions of § 9 reach beyond actions of the federal government to actions of all persons within the jurisdiction of the United States. 16 U.S.C. § 1538(a)(1).

149. 16 U.S.C. § 1532(19).

150. Babbitt v. Sweet Home Chapter of Communities for a Great Oregon, 1995 WL 382088 (June 29, 1995). *See* 50 C.F.R. § 17.3 (1994) (defining "harm" as "an act [by any agency or private person] which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.").

D. Reauthorization of the ESA

Not surprisingly, the administration of the ESA has received mixed reviews, although it appears that practically no one is satisfied with the status quo. On the one hand, environmentalists decry that enforcement of the ESA has fallen victim to political pressure,[151] that the government's approach is scientifically flawed and ineffective,[152] and that USFWS is "ducking its responsibility."[153] On the other hand, increasingly vocal opponents of the ESA claim that it represents an intolerable exercise of special interest influence and governmental arrogance,[154] and that it makes the preservation of species unreasonably important, especially when compared to property rights and jobs.[155]

The ESA was due for reauthorization by Congress in 1992.[156] By 1995, however, the ESA still had not been reauthorized. With the Republican majority in both houses of Congress in 1995, "environmentalists fear that decades of environmental protection may be blown away."[157] Pro-business representatives emphasize that they merely wish to make enforcement of the law more realistic by balancing the cost of environmental protection against the risks.[158] In the face of strong support for gutting the Act through reauthorization, Secretary of the Interior Babbitt has indicated that he would support mitigating certain effects of the law through administrative channels under the existing law.[159]

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151. Michael J. Bean, *Looking Back Over the First Fifteen Years, in* BALANCING ON THE BRINK OF EXTINCTION, *supra* note 63, at 37, 41–42 (listing examples where the USFWS has apparently given in to pressure by development interests, and concluding that "since Tellico Dam, there have been virtually no conflicts between endangered species needs and development desires.").

152. *See* Kunich, *supra* note 121, at 550–71 (describing numerous areas where the ESA's approach to species conservation is subject to scientific fallacies and legal and policy problems).

153. Bolin, *supra* note 128, at 54.

154. Stuart L. Somach, *What Outrages Me About the Endangered Species Act*, 24 ENVTL. L. 801, 801 (1994) (recognizing the need to protect biodiversity, but complaining that the current ESA approach lacks common sense).

155. *See* Stuart Hardy, *The Endangered Species Act: On a Collision Course with Human Needs*, 13 PUB. LAND L. REV. 87, 87 (1992). Hardy warns that, in order to survive to fulfill its promise, the Act must be "soften[ed]" by incorporating "flexibility, balance and accommodation into the [enforcement] process." *Id.* at 97. *See also* Kunich, *supra* note 121, at 571 (asserting that due to inefficient procedures and overly restrictive requirements, the ESA is seriously flawed, that the ESA's flaws might be overlooked if it were successful in its goal of rescuing endangered species, and concluding that "this is emphatically not the case."); Albert Gridari, *The Impact of Section 9 on Private Landowners*, 24 ENVTL. L. 419 (1994) (arguing that the ESA places an unfair burden to conserve endangered species on property owners and developers that should properly be borne by society at large).

156. Dan Fagin, *Reform of Cleanup Bills Left in a Mess*, NEWSDAY, Oct. 16, 1994, at A19.

157. *GOP's Un-Green Posture Worries Environmentalists*, ARIZ. DAILY STAR, Jan. 9, 1995, at A4.

158. *Id.* Opponents of the ESA in Congress have introduced bills that would cripple endangered species protection in two ways. *Taking Aim at the Environment*, NEWSDAY, July 30, 1995, at A37. Proposed reform amendments aim to severely restrict the government's ability to restrain private actions jeopardizing species at risk, while Congress is concurrently planning to slash funding for the agencies responsible for enforcing the Act. *Id.*

159. *Wildlife Law Supported by Babbitt*, ARIZ. DAILY STAR, Jan. 19, 1995, at A5. In fact, President Clinton has proposed flexibility in existing regulations, relaxing restrictions on single family private homes on lots no larger than five acres. Timothy Noah, *Regulatory Shifts for Homeowners are Set by Clinton*, WALL ST. J., July 13, 1995, at A4.

V. THE ESA CREATES A DE FACTO RESERVED WATER RIGHT ADVERSELY IMPACTING TRIBAL RIGHTS

A. Federal Regulatory Reserved Rights

In addition to Indian reserved water rights implied under the *Winters* Doctrine, the Supreme Court has recognized similar federal reserved public proprietary rights.[160] The Court has held that the federal government's claim extends to the minimum volume of water needed to support the purpose for which the public land was originally set aside.[161] It is no surprise that the open-ended nature of federal and Indian reserved water rights is the source of a great deal of anxiety among the owners of state appropriative water rights.[162] One noted commentator has asserted that these fears have not yet been realized because federal and Indian reserved water rights have "internal, self-limiting characteristics," and because of the reluctance of Congress and the judiciary to recognize such implied water rights.[163]

Water rights recognized by the courts as originating under the public trust doctrine[164] have in recent years been asserted primarily by environmental groups and certain federal agencies, notably the USFWS, subsequent to environmental protection laws.[165] Increasingly, these federal regulatory reserved rights are more potent and threatening to vested state appropriative water rights than Indian reserved rights. For example, whereas Indian reserved rights, like state appropriative rights, have a definite priority date and a measure of quantification, the de facto rights are not so limited.[166] The effect of the federal regulatory right could be "to reallocate water from senior water

160. Tarlock, *supra* note 136, at 14.

161. Cappaert v. United States, 426 U.S. 128, 141 (1976). *See supra* note 63 and accompanying text.

162. Tarlock, *supra* note 136, at 15. Holders of state appropriative water rights fear that Indian tribes and/or the federal government will suddenly claim huge amounts of water, thus preventing the junior water rights owners from taking their water allotment. Tarlock, *supra* note 136, at 15. State rights holders find especially troublesome the fact that these rights are not lost due to non-use, and depend on land ownership rather than on the application of water to a beneficial use. *See* Ranquist, *supra* note 52, at 655.

163. Professor Tarlock defines these self-limiting characteristics as the priority date assigned to Indian and other federal reserved rights, and the requirement (at least for federal regulatory reserved rights) that the right be restricted to the minimum volume necessary to achieve the purposes of the reservation. Tarlock, *supra* note 136, at 15. See also *supra* notes 65–67 and accompanying text concerning the Court's holding in United States v. New Mexico, 438 U.S. 696 (1978).

164. The public trust doctrine grew out of a common law right in the public to the beds underlying navigable waters. Illinois Central Railroad v. Illinois, 146 U.S. 387 (1892). Courts have expanded the scope of the trust to include public easements for fishing, commerce, navigation, and even recreational uses. GETCHES, *supra* note 60, at 225.

165. *See* National Audubon Soc'y v. Superior Court, 658 P.2d 709 (Cal. 1983) (applying the public trust doctrine in preventing diversions of water from non-navigable tributaries to the navigable Mono Lake, even though the diversions had been relied on under the prior appropriation system by the residents of southern California for decades), *cert. denied sub nom.* Los Angeles Dep't of Water & Power v. National Audubon Soc'y, 464 U.S. 997 (1983). In Riverside Irrigation Dist. v. Andrews, 758 F.2d 508 (10th Cir. 1985), the ESA, in conjunction with § 404 of the Clean Water Act, 33 U.S.C. § 1344 (1988), was applied to require releases from a dam in Colorado in order to protect whooping crane habitat downstream in Nebraska.

166. Deborah L. Freeman & Carmen M. Sower, *Against the Flow: Emerging Conflicts Between Endangered Species Protection and Water Use*, 40 ROCKY MTN. MIN. L. INST. 23–1, 23–21 (1994).

rights to endangered species, even though the federal government does not have a water right for that purpose."[167]

B. ESA Preemption of Appropriative Rights

The ESA does not include language expressly overriding state or federal water rights. Nevertheless, as the list of endangered species grows, requirements imposed by the ESA will increasingly preempt established water rights.[168] For example, in *Carson–Truckee Water Conservancy District v. Watt*,[169] an irrigation project constructed and operated by the Bureau of Reclamation included a reservoir supporting two species of fish protected under the ESA. The lawsuit arose after the water conservation district attempted to require the Bureau to operate the project for reclamation purposes despite the harm that might result to the habitat of the endangered fish.[170] The district court held that the Secretary of the Interior was required under the ESA to give priority to conservation of critical habitat, even if it meant restricting the reclamation functions of the government project.[171]

The growing clout of the ESA in determining water uses was evident in *United States v. Glenn–Colusa Irrigation District*,[172] involving a dispute between an irrigation district and the National Marine Fisheries Service (NMFS)[173] over requirements of the ESA. The NMFS brought suit to prevent the irrigators from diverting water from the Sacramento River, because the diversion was imperiling a protected species, the winter chinook salmon. The court held that despite language in the ESA providing that federal agencies should cooperate with state and local authorities on issues involving endangered species and water rights,[174] state water rights do not prevail over the restrictions established in the ESA.[175] In the words of one observer, where the ESA has been applied in California, its effect has been "to overwhelm the traditional system of water allocation and development"[176] such that "[f]or all practical purposes, where the Endangered Species Act has been applied, State water rights decisions have ceased to exist."[177] The ESA has attained this

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167. *Id.*

168. *See* Hardy, *supra* note 155, at 94. Moreover, Professor Tarlock has suggested that the ESA "has the potential to trump all existing allocations and to subordinate all water rights to a judicially mandated flow regime." Tarlock, *supra* note 63, at 169.

169. 549 F. Supp. 704 (D. Nev. 1982), *aff'd in part and vacated in part sub nom.* Carson–Truckee Water Conservancy Dist. v. Clark, 741 F.2d 257 (9th Cir. 1984).

170. *Id.* at 706.

171. *Id.* at 710.

172. 788 F. Supp. 1126 (E.D. Cal. 1992).

173. *See supra* note 139.

174. 16 U.S.C. § 1531(c)(2) (1988).

175. 788 F. Supp. at 1134. The court explained that to allow state rights to prevail over the requirements of the ESA

> would render the Act a nullity. The Act provides no exemption from compliance to persons possessing state water rights, and thus the District's state water rights do not provide it with a special privilege to ignore the Endangered Species Act. Moreover, enforcement of the Act does not affect the District's water rights but only the manner in which it exercises those rights.

Id.

176. Gregory K. Wilkinson, *The Impact of the Endangered Species Act on Water Resource Use and Development* 1 (presented at the ABA Section of Natural Resources, Energy and Environmental Law 12th Annual Water Law Conference, Feb. 10–11, 1994).

177. *Id.* at 2. Wilkinson describes the restrictions imposed by the ESA on the operations of irrigation projects as affecting when irrigators may pump, the rate of pumping permitted, the

supremacy over state water rights in part because of the failure of traditional water allocation schemes to protect species at risk, and as a result of the application of the ESA to protect species regardless of the cost.[178]

C. Preemption of Indian Winters *Rights on the San Juan River*

Whatever the eventual fate of the reauthorization of the ESA, its application in recent years has had the effect of establishing for endangered fish de facto regulatory reserved water rights.[179] These de facto reserved rights have effectively prevented Indian tribes on the San Juan River from fully developing their *Winters* rights.[180] Among the tribal projects planned to develop San Juan River water, the Animas–La Plata project has been the most conspicuous victim of ESA-based preemption.

At the time of the Colorado Ute Settlement in 1988, the USFW had cleared the ALP via a biological opinion issued pursuant to section 7 of the ESA.[181] However, in 1990 the USFWS suddenly issued a draft opinion declaring that any additional depletions of San Juan River water would adversely affect the recovery of the squawfish: the ALP could not be constructed.[182]

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duration of operation of facilities, and the amount of carryover storage allowed in associated reservoirs. *Id.* at 1–2.

178. *See id.* at 2.

179. Tarlock, *supra* note 136, at 13. *See also* Stanley M. Pollack, *The Endangered Species Act: A Constraint on the Development of Indian Reserved Rights* (1994) (presented during the Indian Water Rights Conference, Stan. L. Sch., Sept. 9–10, 1994) (discussing the effects of the de facto regulatory reserved water right on development of tribal San Juan River water).

180. *See* discussion *infra* notes 181–98. The supremacy of the de facto endangered species water right seems odd in light of the fact that *Winters* rights for Indian tribes claiming San Juan River water have a priority date senior to nearly all other users. Furthermore, the lands of tribes claiming rights to San Juan River water, particularly those of the Navajo Nation, are expansive. Hypothetically, if a mere four percent of the 25,000 square mile Navajo Reservation were deemed practicably irrigable acreage, the Navajos would be entitled to 2 million acre-feet/year of water. Back & Taylor, *supra* note 11, at 73–74. *See also* David H. Getches & Charles J. Meyers, *The River of Controversy: Persistent Issues, in* NEW COURSES FOR THE COLORADO RIVER: MAJOR ISSUES FOR THE NEXT CENTURY, *supra* note 10, at 51, 64 (discussing the potential claims of the "huge" Navajo Reservation, as well as claims of several other Indian reservations).

181. Memorandum on Formal Section 7 Consultation on the Animas–La Plata Project, from the Acting Regional Director, USFWS Region 2, to the Regional Director, Bureau of Reclamation, Water and Power Resources Service, Salt Lake City, Utah (Dec. 28, 1979) [hereinafter 1979 Biological Opinion] (on file with the *Arizona Law Review*). In his memorandum, the Acting Regional Director declared, "[i]t is my biological opinion that in spite of alterations to the San Juan River as a result of the proposed project, the action is not likely to jeopardize the Colorado squawfish as a species nor destroy habitat essential to their survival." *Id.* at 5.

182. *See* Memorandum on the Draft Biological Opinion for the Animas–La Plata Project, Colorado and New Mexico, from the Regional Director, USFWS Region 6, Denver, Colorado, to the Regional Director, Bureau of Reclamation, Upper Colorado Regional Office, Salt Lake City, Utah (May 4, 1990). The reasons for USFWS' altered stance regarding the importance of the San Juan River system to the recovery of the Colorado squawfish between the 1979 biological opinion and the 1990 Draft Biological Opinion are detailed in the Memorandum regarding the Final Biological Opinion, Animas–La Plata Project, Colorado and New Mexico, from the Regional Director, USFWS Region 6, Denver, Colorado, to the Regional Director, Bureau of Reclamation, Upper Colorado Regional Office, Salt Lake City, Utah 18–20 (Oct. 25, 1991) [hereinafter 1991 Final Biological Opinion] (on file with the *Arizona Law Review*).

Coming shortly before the scheduled ground-breaking ceremonies for the ALP, the USFWS' decision enraged the affected states and tribes.[183] The tribes were particularly offended because the Department of the Interior, of which the USFWS is a part, had been involved at every turn in the negotiation of the settlement and the enactment of the enabling legislation.[184] After a year and a half of negotiations between the San Juan River tribes,[185] affected municipalities, irrigators, water conservancy districts, and state and federal government representatives, the USFWS issued a final biological opinion in October 1991.[186] While the opinion included a reasonable and prudent alternative (RPA), it authorized the depletion of only approximately one-third of the water included in the Colorado Ute settlement agreement.[187] The RPA anticipates that the balance of the project will be reevaluated after seven years, with authorization contingent on the habitat needs of the endangered fish.[188] At the same time, the U.S. Environmental Protection Agency has raised several additional concerns regarding the requirements of the National Environmental Policy Act and the Clean Water Act, which could delay the project indefinitely.[189]

In October 1991, the USFWS also issued a formal section 7 consultation biological opinion on the operation of the NIIP.[190] In contrast to the ALP, which had not progressed beyond the planning stage, the NIIP was partially constructed and in operation.[191] The biological opinion found that the proposed continuing expansion of the NIIP would have two effects potentially jeopardizing the Colorado squawfish and the razorback sucker.[192] Depletions of San Juan River water to irrigate the additional acreage would not only reduce flows below the critical volume identified in the ALP biological opinion, but

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As a consequence of its new position on the San Juan River regarding Colorado squawfish, in August 1991 the USFWS amended the Colorado Squawfish Revised Recovery Plan to include the San Juan River Basin. *Id.* at 20.

183. Lois G. Witte, *Negotiating an Indian Water Rights Settlement: The Colorado Ute Experience* 13–14 (1991) (presented at the Innovation in Western Water Law and Management Symposium, Natural Resources Law Center, June 5–7, 1991).

184. *Id.* at 14.

185. The Ute Mountain Ute, Southern Ute, and Jicarilla Apache Indian tribes and the Navajo Nation all participated in the negotiations, since the ALP biological opinion could affect water use throughout the San Juan River basin. *Id.*

186. *See* 1991 Final Biological Opinion, *supra* note 182.

187. *See* Witte, *supra* note 183, at 15. It should be noted that although the Navajo Nation participated in negotiations leading to the 1991 Final Biological Opinion, the Nation has objected strenuously to several aspects of the RPA. Letter from Stanley M. Pollack, Special Counsel for Water Rights, Navajo Nation Department of Justice (Sept. 27, 1995) (on file with the *Arizona Law Review*). Because the limited use of San Juan River water for the ALP permitted under the RPA was made possible at least in part at the expense of the Navajo Nation's ability to continue to develop the NIIP, the Nation did not sign a memorandum of understanding to implement the RPA. *Id.* For the same reason, the Nation has declined to sign a cooperative agreement for the San Juan River Recovery Implementation Program. *Id. See also* Electa Draper, *Navajos identify A-LP's negatives*, DURANGO HERALD, Sept. 29, 1995, at A1 (detailing Navajo Nation concerns over development of the ALP).

188. McElroy, *supra* note 114, at 6–7.

189. McElroy, *supra* note 114, at 7–8.

190. Memorandum from the Region 2 Director, USFWS to the Navajo Area Director, Bureau of Indian Affairs (Oct. 28, 1991) (on file with the *Arizona Law Review*).

191. At the date of the biological opinion, the NIIP had developed a total of 54,500 acres out of a total 110,630 acres authorized for development in 1962 and ultimately planned for irrigation. *Id.* at 2.

192. *Id.* at 16.

would also increase levels of selenium in the San Juan River.[193] The RPA developed to mitigate the jeopardy to the endangered fish from the expansion of NIIP included limiting already developed blocks to the total under cultivation in 1991, imposing restrictions on crop types, preempting full development of other Navajo irrigation projects on the river, and placing a cap on the Navajo Nation's total depletion of San Juan River water.[194] In effect, the Nation would be prevented from developing any additional San Juan River water.

The San Juan River Indian tribes have been placed in an untenable position. In 1908, the Supreme Court recognized a reserved right to water necessary to fulfill the purposes of Indian reservations.[195] Yet, without either a quantification of the right or the financial resources necessary to develop the water, the San Juan River tribes were unable to develop fully their reserved water. In recent years, the tribes have finally obtained a settled quantification of all or part of their reserved rights to the San Juan River, along with commitments from the federal government to enable the tribes to put the water to use. Now, through the enforcement of the ESA, the federal government has restricted the development of the tribes' San Juan River water rights so severely that the efficacy of the settlements is in serious dispute.[196]

This situation is especially ironic in light of the fact that the indigenous fish were endangered by federal reclamation projects constructed to develop water with priorities generally junior to those of the San Juan River tribes.[197] The operation of numerous dams constructed by the Bureau of Reclamation has altered the natural water chemistry and temperature, and the timing and duration of high and low flows of the Colorado River and its tributaries.[198] These changes in the river system's natural condition have disrupted the migratory and spawning habits of the endangered fish and are considered the most significant cause of jeopardy to the fish.[199]

D. San Juan River Tribes' Response to Preemption by the ESA

On March 21, 1994, the USFWS designated critical habitat for four species of endangered Colorado River Basin fish.[200] The designation affects vast stretches of the Colorado River system, a major portion of which is located

193. *Id.* at 16–18. Selenium is a non-metallic element that may be leached out of soils by irrigation and that in concentrations above certain levels may threaten the survival or reproductive capability of fish.

194. *Id.* at 19–20.

195. Winters v. United States, 207 U.S. 564, 576 (1908).

196. *See* McElroy, *supra* note 114, at 8–9.

197. *See* Bolin, *supra* note 128, at 37–39.

198. Peter Evans, *A "Recovery" Partnership for the Upper Colorado River to Meet ESA §7 Needs*, 8 NAT. RESOURCES & ENV'T 24, 24 (1993). Even more ironic, perhaps, is the fact that the USFWS permitted the state fish and game agency to chemically treat (poison) San Juan River native fish populations before the Bureau of Reclamation closed the Navajo Dam. W. L. MINCKLEY, BATTLE AGAINST EXTINCTION 131 (1991).

199. *See* Bolin, *supra* note 128, at 38. *See also* Marston, *supra* note 87, at 208–10 (describing how the placement of dams has transformed the river system into a series of mountain streams "with new headwaters starting at each major dam": a fit environment for the non-native trout, but not for the Colorado squawfish).

200. Endangered and Threatened Wildlife and Plants; Determination of Critical Habitat for the Colorado River Endangered Fishes: Razorback Sucker, Colorado Squawfish, Humpback Chub, and Bonytail Chub, 50 C.F.R. Part 17, effective Apr. 20, 1994. 59 Fed. Reg. 13,374–400.

adjacent to tribal lands.[201] The exact effect this federal action might have on tribal use of the waters of the Colorado and its tributaries is unclear. However, the USFWS' economic study was based on one startling assumption: the designation would preclude new development in the Upper Basin.[202] Even so, the USFWS determined that the "projected negative impacts that could occur in the various State economies were so small when compared to the base economies that they are probably nonexistent...."[203]

In response, on June 28, 1994, the four San Juan River tribes served the Secretary of the Interior with Notice of Intent to Sue Under the Endangered Species Act.[204] Among the tribes' claims were that the USFWS did not examine the effect of the designation on tribal economies as required by the ESA,[205] that the Department of the Interior improperly subordinated its fiduciary responsibility to the tribes in favor of its obligations under the ESA, and that the USFWS' biological analysis was flawed.[206] If the USFWS did not address the inadequacies in the designation, the tribes contemplated asking the federal courts to set aside the critical habitat designation and to enjoin its implementation, to declare that the USFWS may not interfere with the development of the ALP and NIIP on endangered species grounds until critical habitat is properly designated, and to require the Department of the Interior to properly discharge its fiduciary duty to the tribes.[207]

In addition to filing the notice, the San Juan River tribes have proposed significant amendments to the regulations implementing the ESA.[208] The proposed amendments share the assumption that the agencies within the Department of the Interior, including the USFWS, will more stringently observe their trust responsibilities to the tribes.[209] Among the tribes' recommendations is that the USFWS may not designate critical habitat affecting tribal interests if another alternative is possible that would achieve the goals of concurrently protecting tribal interests and preserving the endangered species.[210] In addition, the tribes insist that USFWS enforce the ESA regulations in a manner consistent with the general legal standard that "termination or diminution of Indian rights requires express legislation or a clear inference of Congressional intent."[211] The tribes further propose that the USFWS involve

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201. *Id.* at 13,383–84.

202. *Deconstructing the Colorado River: Part I*, WATER STRATEGIST, Jan. 1994, at 1, 12 [hereinafter *Deconstructing, Part I*].

203. 59 Fed. Reg. 13,374, 13,380 (Mar. 21, 1994).

204. [hereinafter Notice]. The Notice was dated June 28, 1994 and signed by attorneys for each San Juan River tribe (copy on file with the *Arizona Law Review*).

205. 16 U.S.C. § 1533(b)(2), discussed *supra* at note 134 and accompanying text. The tribes argued that the economic analysis conducted by the USFWS was made too "broad and sweeping" by considering only state and national impacts, thus "diffusing the impact on tribal economies." Notice, *supra* note 204, at 2.

206. Notice, *supra* note 204, at 2–3.

207. Notice, *supra* note 204, at 3–4.

208. Stanley M. Pollack, *The Endangered Species Act: A Constraint on the Development of Indian Reserved Rights* 10 (1994) (presented during the Indian Water Rights Conference, Stan. L. Sch., Sept. 9–10, 1994).

209. *See* Secretarial Order, *supra* note 78.

210. *See* Notice, *supra* note 204, at 4.

211. Colville v. Walton, 647 F.2d 42, 50 (9th Cir. 1981), *cert. denied*, 454 U.S. 1092 (1981).

any affected tribe in consultations initiated pursuant to section 7 of the ESA[212] and include any tribe potentially impacted by critical habitat designation in the designation process.[213]

Realistically, however, it is unlikely that heightened federal sensitivity to Indian trust responsibilities in the enforcement of the ESA will significantly affect the ability of the tribes to utilize San Juan River water over the long-term. In the rush to develop the waters of the Southwest, the needs of the area's original occupants—the Native Americans and the indigenous flora and fauna—have largely been either exploited or ignored. As an ironic consequence, the interests of these forgotten players are now often adversarial.[214] Moreover, tribal lands in the West are largely isolated and undeveloped.[215] The lack of economic activity has left many western Indian reservations poor but picturesque enclaves of critical habitat.[216] Thus, Indian tribes are made to bear a disproportionate burden of the protection of endangered species.[217]

The establishment of reservations in the western United States during the nineteenth century typically involved a cession by the Indians of vast areas of aboriginal lands to the federal government.[218] At that time, the federal government warned the tribes that because pressures for land and resources were so intense, Native Americans could only be protected from the onslaught of non-Indian settlement by agreeing to be confined to much smaller, distinct reservations.[219] In fact, the aggressive settlement of the West was engineered and managed by the federal government itself.[220] Despite federal reassurance that the reservation boundaries would be protected from further incursions and that the Indians would not be required to make additional land concessions, these promises frequently proved to be empty.[221] For many tribes, at least, the loss of water rights in the twentieth century may be as complete and as debilitating as the expropriation of their land in the nineteenth century.[222]

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212. 16 U.S.C. § 1536. *See supra* notes 138–47 and accompanying text for a summary of § 7 requirements.

213. Pollack, *supra* note 208, at 11.

214. Stanley M. Pollack, *Native Fishes vs. Native Americans: Endangered Species in Conflict*, THE GREENFIRE REP. 3–4 (Sept./Oct. 1992) (raising the novel but thought-provoking concept that Native Americans might be considered an endangered human culture in need of protection as fully as endangered species).

215. *See id.* at 3. In the Court's opinion in *Arizona v. California*, Justice Black observed wryly, "[i]t can be said without overstatement that when the Indians were put on these reservations they were not considered the most desirable area of the Nation." 373 U.S. 546 (1963) (referring to the Lower Colorado River Indian reservations).

216. *See* Pollack, *supra* note 214, at 3. *See also* tbl. 5, Final Rule, Critical Habitat for the Colorado River Endangered Fishes, 59 Fed. Reg. 13,374, 13,384 (Mar. 21, 1994) (indicating that a large proportion of critical habitat designated for the endangered Colorado fishes is on tribal land).

217. *See* Pollack, *supra* note 214, at 3.

218. Joseph R. Membrino, *Indian Reserved Water Rights, Federalism and the Trust Responsibility*, 27 LAND & WATER L. REV. 1, 14 (1992).

219. Getches, *supra* note 67, at 8, 9.

220. Settlement of the Native American's aboriginal lands was largely the result of federal policies promoting the population of the West in order to create a revenue base for the fledgling states and to provide opportunity for "landless, unemployed eastern workers" and new immigrants. COGGINS ET AL., *supra* note 80, at 83. *See also supra* notes 79–86 and accompanying text.

221. Getches, *supra* note 67, at 9.

222. Membrino, *supra* note 218, at 14.

VI. MARKETING INDIAN RESERVED RIGHTS

Faced with the reality that Congress will no longer fund large new reclamation projects, and that endangered species protection will likely not allow any significant additional diversions from the river, the San Juan River tribes are faced with one attractive but highly controversial option: to market their water rights off-reservation.[223] Marketing water generally occurs through sale, lease, exchange, or deferral of use.[224] While the marketing of state water rights is becoming more commonplace,[225] the opposition to marketing Indian water rights is substantial.[226] Additionally, Indian tribes located within the Colorado River Basin are faced with the vagaries of the Law of the River as it relates to marketing. Yet numerous recent negotiated settlements of Indian reserved water rights within the Basin have included limited opportunities for tribes to market water off-reservation.[227]

A. Controversy Over the Scope of Winters *Rights*

Changes in western water economics have resulted in a marked shift in emphasis from the use of reclamation projects for agricultural purposes to filling the water needs of cities and industry.[228] However, there is a wide divergence of opinion as to whether Indian water rights may play a part in this trend.

Those opposed to the off-reservation use of Indian reserved water argue that *Winters* rights do not share the attribute of transferability common to appropriative rights and that "Indian reserved rights were never intended to serve any function other than adding to the productivity of the reservation."[229] Proponents of this view contend that because the Indian reserved right was "created as an adjunct to land" it is valid only when used on the land.[230] Additionally, *Arizona v. California* held that allocations of Colorado River water to Indian reservations are charged against the state in which the reservation is located.[231] As a result, many western states are doggedly opposed to the marketing of Indian reserved water rights out-of-state.[232] Obviously, such crabbed views of the nature of Indian reserved rights cannot be accommodated equitably where tribes are prevented by federal endangered species protection law from diverting established water rights onto tribal lands.

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223. *See* Steven J. Shupe, *Indian Tribes in the Water Marketing Arena*, 15 AM. INDIAN L. REV. 185, 187 (1990) (concluding that water marketing may be the best option for many western water rights holders to obtain economic value for their water rights).

224. *See* John D. Musick, Jr., *Reweave the Gordian Knot: Water Futures, Water Marketing, and Western Water Mythology*, 35 ROCKY MTN. MIN. L. INST. 22–1, 22–5 to 22–6 (1989).

225. *See infra* notes 292–96 and accompanying text.

226. MARC REISNER & SARAH BATES, OVERTAPPED OASIS 95–97 (1990) (after listing the formidable obstacles to Indian water marketing, the authors nonetheless conclude that "off-reservation marketing of Indian water is inevitable").

227. *See infra* notes 303–10 and accompanying text.

228. *See* Membrino, *supra* note 218, at 23.

229. Jack D. Palma II, *Considerations and Conclusions Concerning the Transferability of Indian Water Rights*, 20 NAT. RESOURCES J. 91, 94 (1980).

230. *Id.* at 93.

231. 373 U.S. 546, 601 (1963).

232. *See* Shupe, *supra* note 223, at 203.

In contrast, numerous commentators have advocated the use of Indian reserved rights off-reservation.[233] This view incorporates the concept of a "permanent homeland" as the purpose of reservations, and broadly interprets the allowable uses of water to attain that goal. There is substantial support for the permanent homeland purpose of Indian reservations in federal court decisions. In *Winters,* the Court anticipated the use of reserved waters for agriculture and for the "arts of civilization."[234] Ten years later, the Court announced that the purpose of Indian reservations was to "encourage, assist and protect the Indians in their effort to train themselves to habits of industry, become self-sustaining and advance to the ways of civilized life."[235] After the Court defined the PIA standard for quantification of the *Winters* right in *Arizona v. California,* it determined that water rights based on the agricultural use standard were not restricted "to irrigation or other agricultural application."[236]

The Ninth Circuit advanced the proposition that the purposes of Indian reservations are not restricted to agricultural pursuits in *Colville Confederated Tribes v. Walton.*[237] The court found that the purpose of an Indian reservation to provide a homeland is "a broad one, and must be liberally construed."[238] Citing *Walton,* the Eastern District Court of Washington proclaimed that "[i]t is

233. Hearings before the Subcommittee on Water and Power, Committee on Energy and Natural Resources (June 9, 1994) (statement of David H. Getches) [hereinafter Getches, Testimony] (urging Congress to fulfill its fiduciary duty to Indians and consider amending federal statutes and the Law of the River to allow off-reservation leasing); WATER COMMISSION, *supra* note 56, at 481 (suggesting leases of limited duration on fully appropriated river systems); David J. Guy, *When the Law Dulls the Edge of Chance: Transferring Upper Basin Water to the Lower Colorado River Basin,* 25 UTAH L. REV. 25, 34 (1991) (advocating changing existing law to allow interbasin transfer of water from the ALP to the Lower Basin, subject to state law constraints); Bill Leaphart, *Sale and Lease of Indian Water Rights,* 33 MONT. L. REV. 266, 275–76 (1972) (arguing against the requirement that Indians apply reserved water only to relatively low-yield agricultural uses); Membrino, *supra* note 218 (warning that opposition to off-reservation marketing, if successful, may ultimately portend the demise of the Indian reserved water right); Karen M. Schapiro, *An Argument for the Marketability of Indian Reserved Water Rights: Tapping the Untapped Reservoir,* 23 IDAHO L. REV. 277, 291 (1986/87) (basing an argument in favor of Indian water transfers on the need to put western water to its most efficient use, and noting that water is the only resource Congress has not allowed Indians to lease); Christine Lichtenfels, Comment, *Indian Reserved Water Rights: An Argument for the Right to Export and Sell,* 24 LAND & WATER L. REV. 131, 150 (1989) (asserting that Indian water transfers are supported by "[l]aw, logic and integrity"); Liu, *supra* note 67 (supporting the marketing of Indian water rights on three bases: redressing the historic lack of federal reclamation projects for Indians, normative arguments supporting distributional justice, and notions of tribal sovereignty and autonomy); Lee H. Storey, Comment, *Leasing Indian Water Off the Reservation: A Use Consistent With the Reservation's Purpose,* 76 CAL. L. REV. 179, 206–19 (1988) (emphasizing the benefits of off-reservation water leasing to both tribal economies and other western water interests).

234. 207 U.S. 564, 576 (1908).

235. Alaska Pac. Fisheries v. United States, 248 U.S. 78, 89 (1918). *See, e.g.,* McClanahan v. Arizona State Tax Comm'n, 411 U.S. 164, 174 (1973) (where the Court reaffirmed the concept of the reservation as a permanent home).

236. Arizona v. California, 439 U.S. 419, 422 (1979) (Supplemental Decree).

237. 647 F.2d 42 (9th Cir. 1981), *cert. denied,* 454 U.S. 1092 (1981).

238. *Id.* at 47. With respect to the Colville Reservation, the court expressly considered the tribe's "need to maintain themselves under changed circumstances" in determining the purposes for which the reservation was established. *Id.*

settled law that when a Tribe has a vested property right in reserved water, it may use it in any lawful manner."[239]

Congress retained the authority to authorize the transfer of Indian lands under the Nonintercourse Act.[240] Because the Act's restrictions expressly apply to land, there has been some question as to its applicability to the transfer of Indian reserved water.[241] While the Supreme Court has not directly considered this question, federal case law seems to hold that the Act does constrain the transfer of Indian water without Congressional authorization.[242] In contrast, Congress has authorized the Secretary of the Interior to approve leases of Indian lands for mining, oil and gas production, timber sales, and farming by non-Indians.[243] A persuasive reason advanced for this lack of delegated authority is that Indian water marketing in general is a relatively new phenomenon and that Indian water rights have only recently begun to be quantified.[244] Nevertheless, limited marketing of Indian reserved rights has been approved by Congress in the context of individual tribal water rights settlements.[245]

B. Constraints Imposed by the Law of the River

Resting on "a delicate and carefully crafted foundation,"[246] the Law of the River has resisted change.[247] For instance, the assertion of water rights by Indians has been characterized as the "sword of Damocles that hangs over the West...[that] threatens, like nothing else, to sever the complex web of laws, agreements, regulations, quiet understandings, and court decisions that, collectively known as 'the law of the river,' constitute the major determinant in the growth of the West...."[248] Indeed, it has been suggested that pigs will take to the air before the Colorado River Compact is amended.[249] Yet others have

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239. United States v. Anderson, 591 F. Supp. 1, 7 (E.D. Wash. 1982), *rev'd on other grounds*, 736 F.2d 1358 (9th Cir. 1984). The Ninth Circuit emphasized that "[t]he tribe is...entitled to utilize its water for any lawful purpose." 736 F.2d at 1365. The district court permitted the Spokane Tribe to utilize a water right quantified by agricultural uses for the maintenance of a fishery located on the reservation. But see *In re* The Gen. Adjudication of All Rights to Use Water in the Big Horn River Sys., 835 P.2d 273 (Wyo. 1992), where a fractured Wyoming Supreme Court held that tribes could not transfer reserved rights for irrigation to instream maintenance uses, and that changes in the use of reserved water rights are subject to state water law in Wyoming.

240. The Act provides that "No purchase, grant, lease, or other conveyance of lands, or of any title or claim thereto, from any Indian nation or tribe of Indians, shall be of any validity in law or equity, unless the same be made by treaty or convention entered into pursuant to the Constitution." 25 U.S.C. § 177 (1988).

241. *See* Schapiro, *supra* note 233, at 288–89.

242. *See* Schapiro, *supra* note 233, at 288–89.

243. *See* Leaphart, *supra* note 233, at 275. *See also* 25 U.S.C. § 415 (1982) (authorizing tribes, with consent of the Secretary of the Interior, to lease tribal land for "public, religious, educational, recreational, or business purposes"); Skeem v. United States, 273 F. 93, 96 (9th Cir. 1921) (holding that lessees of tribal lands may use Indian water rights on the leased lands).

244. *See* Charles F. Wilkinson, *Lessons and Directions, in* INDIAN WATER IN THE NEW WEST, *supra* note 46, at 221, 224.

245. *Id.* at 225. *See also infra* notes 302–10.

246. Getches, *supra* note 17, at 476.

247. *See* Lindgren, *supra* note 36, at 25–13.

248. FRADKIN, *supra* note 2, at 155.

249. Gary D. Weatherford & F. Lee Brown, *Introduction: A Timely Look at a Timeless River, in* NEW COURSES FOR THE COLORADO RIVER: MAJOR ISSUES FOR THE NEXT CENTURY, *supra* note 10, at 3.

recognized that the Law of the River is a "body of rules that evolves in response to the changing complexions of political power, economic demand, social need, and climate."[250]

Intra-basin and inter-basin transfers of water are new developments under the Law of the River most vital to the marketing of San Juan River tribal water. The San Juan River is an Upper Basin tributary, while the potential markets are located primarily in the Lower Basin. Article III(a) and Article III(e) of the Colorado River Compact (CRC) are frequently cited as obstacles to inter-basin transfers.[251] Article III(a) apportions to each basin the "exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum."[252] This provision is frequently interpreted as confining the use of the Upper Basin apportionment to the Upper Basin. A more realistic reading, however, is that the apportionment is an assignment of legal control to the Upper Basin states rather than a geographic limitation of use.[253]

Under Article III(e), Upper Basin states must not "withhold water, and the States of the Lower [Basin] shall not require the delivery of water which can not reasonably be applied to domestic and agricultural uses."[254] Lower Basin interests have read Article III(e) narrowly to mean that no transfers need to be recognized so long as the Upper Basin does not use its full allocation.[255] Yet it would be inconsistent with the intent of the CRC to interpret Article III(e) to mean that unless the Upper Basin states were to put their full allocation to a beneficial use in the Upper Basin, the Lower Basin could freely consume the Upper Basin's unused allocation. Article III(e) may be better interpreted as permitting an Upper Basin state to contract with Lower Basin interests that the Upper Basin state would not put a set quantity of water to beneficial use for a specified period, allowing the Lower Basin interest to use that quantity for the term of the contract.[256]

Article VIII of the CRC requires that "rights to the beneficial use of waters of the Colorado River System shall be satisfied solely from the water apportioned to that basin in which they are situate."[257] Thus, Article VIII may prohibit one basin from acquiring a vested water right in the other basin. It is unlikely, however, that the article was intended to prohibit the transfer of water under a sale, lease, exchange or other agreement which involves a temporary use of an enforceable water right.[258]

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250. Gary D. Weatherford & F. Lee Brown, *Epilogue: High Water, Carbon Dioxide, and Pig Feathers, in* NEW COURSES FOR THE COLORADO RIVER: MAJOR ISSUES FOR THE NEXT CENTURY, *supra* note 10, at 230. *See also* Lindgren, *supra* note 36, at 25–34 (asserting that there is substantial support for the view that the Law of the River is "sufficiently flexible to accommodate new approaches").

251. Lindgren, *supra* note 36, at 25–34.

252. 70 CONG. REC. 324, 325 (1928).

253. Lindgren, *supra* note 36, at 25–35. *See also* Guy, *supra* note 233, at 33 (proposing that, read in conjunction with Article III(e), Article III(a) is merely a prohibition of wasteful use).

254. 70 CONG. REC. 324, 325 (1928).

255. *See* Guy, *supra* note 233, at 34.

256. *See* Lindgren, *supra* note 36, at 25–35.

257. 70 CONG. REC. 324–25 (1928).

258. *See* Guy, *supra* note 233, at 35 (suggesting that the drafters of the CRC were "concerned with the basin states' *needs* for water rather than their *use* of water").

The 1964 decree implementing the Court's decision in *Arizona v. California*[259] also includes provisions relied upon by opponents to water marketing. Article II(B)(1) of the decree forbids the Secretary of the Interior to release "water controlled by the United States"[260] in amounts inconsistent with the BCPA apportionments.[261] Because the decree is concerned primarily with the apportionment of the 7.5 million acre-feet/year allocated to the Lower Basin, it is doubtful that Article II(B)(1) was intended to prohibit transfers from the Upper Basin.[262]

C. Attempts to Market Interbasin Waters

Between 1987 and 1992, California's average annual use of Colorado River water exceeded its entitlement under the "Law of the River" by nearly 600,000 acre-feet.[263] During the same period, Nevada water users took approximately half of that state's allocation.[264] Moreover, because of explosive population growth in Las Vegas, state officials expect growing demand to deplete Nevada's allocation of Colorado River water by 2006.[265]

In contrast, largely due to the underutilization of Central Arizona Project water by farmers, Arizona's average annual Colorado River water use between 1987 and 1992 was approximately 770,000 acre-feet/year less than its allocation of 2.8 million acre-feet/year.[266] Predictions of when Arizona's allocation will be fully utilized vary.[267] However, the exact date Arizona attains the unenviable status of over-allocation is largely beside the point. More important is that the Lower Basin's 7.5 million acre-feet annual allocation may soon be fully utilized,[268] demand in the Lower Basin continues to expand,[269] potentially vast Indian reserved water rights remain to be quantified,[270] environmental regulation increasingly impacts permissible uses for Colorado River Basin

259. 376 U.S. 340 (1964).

260. *Id.* at 342. Water controlled by the United States means water in Lower Basin reservoirs operated by the Bureau of Reclamation, or in the mainstem Colorado. Lindgren, *supra* note 36, at 25–36.

261. *See supra* note 26 and accompanying text.

262. *See* Lindgren, *supra* note 36, at 25–36.

263. California's average use was 4,997,084 acre-feet per year even though its allocation is 4,400,000 acre-feet annually. *See Deconstructing, Part I, supra* note 202, at 2.

264. *See Deconstructing, Part I, supra* note 202, at 2.

265. Memorandum from the Director of the Colorado River Commission to Representatives of the 7/10 Committee 2 (Jan. 22, 1993) [hereinafter Memorandum to 7/10 Committee] (on file with the *Arizona Law Review*). The 7/10 Committee is an association of representatives of the seven Colorado River Basin states, *see supra* note 8, and the ten Colorado River tribes: the Colorado River, Chemehuevi, Ft. Mojave, Quechan, and Cocopah Tribes, with decreed rights under *Arizona v. California*; the Southern Ute, Ute Mountain Ute, Jicarilla Apache, and Northern Ute Tribes, with water rights quantified under settlements enacted by Congress; and the Navajo Nation, with statutory rights to water for irrigation projects, and claims for other reserved water rights, *see* CHECCHIO & COLBY, *supra* note 105, at 25.

266. *See Deconstructing, Part I, supra* note 202, at 2.

267. *See Deconstructing, Part I, supra* note 202, at 11–12. The formation of Groundwater Replenishment Districts by the state's Department of Water Resources should result in the replacement of groundwater by significant volumes of CAP water. *Deconstructing, Part I, supra* note 202, at 11.

268. *See Deconstructing, Part I, supra* note 202, at 2.

269. Lindgren, *supra* note 36, at 25–25.

270. *See supra* note 180.

water,[271] and unused Upper Basin water is available to meet Lower Basin demand.[272]

The predictable response to these conditions has been the advancement of proposals to market Upper Basin water to Lower Basin users.[273] Although a number of interbasin marketing agreements have been proposed in recent years, none has progressed beyond preliminary discussions.[274] Probably because its needs for additional Colorado River water are immediate, Nevada has not been deterred from exploring new avenues of water acquisition.[275] In its memorandum to the 7/10 Committee (an organization of Colorado River Basin states and Indian tribes),[276] the Colorado River Commission of Nevada took an expansive view of the prospects for interstate marketing.[277] The Commission evinced support for the accommodation of the needs of all basin citizens, and declared that such accommodation "does not mean preservation of the status quo in its entirety or a rigid deference to the 'Law of the River' as presently or historically interpreted."[278] The Commission then admitted that "[u]ndoubtedly, some modifications of the legislation and decrees governing river operations may be required to manage the river for its users into the 21st century."[279]

Arizona, on the other hand, has concluded that it cannot afford to be quite so sanguine about the future of interbasin transfers. The Governor's Central Arizona Project Advisory Committee has studied and reported on the possibility of marketing under-utilized CAP water to Nevada and California.[280] The Commission concluded that attempting to market a portion of its low priority CAP water would likely lead to adjustments to the Law of the River

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271. *See Deconstructing, Part I, supra* note 202, at 1.
272. *See* Lindgren, *supra* note 36, at 25–25.
273. *See* Guy, *supra* note 233, at 26.
274. Ariz. Dep't of Water Resources, Preliminary Draft Report of the Governor's Central Arizona Project Advisory Committee: Marketing Colorado River Water to California or Nevada Users, at 21 (Apr. 21, 1993) [hereinafter ADWR Preliminary Draft Report]. For instance, the Galloway Project proposal involved the release of water from off-stream reservoirs in Colorado for eventual delivery to the San Diego County Water Authority in California. *See* Lindgren, *supra* note 36, at 25–26. The Galloway Proposal would have leased 10% of Colorado's allocation under the UCRBC without state approval. Getches, *supra* note 17, at 474. The State Engineer of New Mexico termed the proposal "illegal, immoral or dangerous to the current comity among the states." Stephanie Landry, *The Galloway Proposal and Colorado Water Law: The Limits of the Doctrine of Prior Appropriation*, 25 NAT. RESOURCES J. 961, 961 (1985). Less reviled, but similarly unsuccessful, was a subsequent marketing initiative proposed by the Resource Conservation Group. The Resource Conservation proposal involved the temporary leasing of retired irrigation water rights and water from existing storage projects in Wyoming. *See* Lindgren, *supra* note 36, at 25–26. In the view of one commentator, neither proposal could succeed because they entailed "entrpreneurial intermediaries" and because neither basin was prepared to accept the idea of interbasin marketing. *Id.* at 25–27.
275. *See generally Deconstructing, Part I, supra* note 202, at 9, 11 (describing interbasin water transfer schemes considered by the State of Nevada, including a transfer of water from Colorado that had previously been intended for use in developing oil shale). Nevada has even received a proposal involving the transporting of fresh water from Alaska to Mexico, in exchange for Nevada's use of a portion of Mexico's Colorado River water allocation. *See Deconstructing, Part I, supra* note 202, at 11.
276. *See supra* note 265 for a listing of the membership of the committee.
277. *See* Memorandum to 7/10 Committee, *supra* note 265.
278. Memorandum to 7/10 Committee, *supra* note 265, at 2.
279. Memorandum to 7/10 Committee, *supra* note 265, at 3.
280. *See* ADWR Preliminary Draft Report, *supra* note 274.

that would ultimately retard rather than advance the state's interests.[281] Specifically, the state feared that: 1) if interstate marketing were allowed, other parties with higher priority rights (particularly Colorado River tribes) would enter the market and drive down the value of CAP water; 2) marketing of currently unused Upper Basin water in the Lower Basin would expose the CAP to water shortages; and 3) direct leases or sales between states could require a change in the Law of the River.[282] If the Law were reopened, Arizona might lose a portion of its underutilized allocation to California and Nevada.[283]

As the pressure for more flexibility in the Law of the River grows, conceptual models for some type of administrative water transfer clearinghouse appear with increasing regularity. Recent years have seen calls for a "basinwide compact commission...established through a new federal-interstate compact,"[284] and a comprehensive "Colorado River Basin Authority."[285] California, Arizona and Nevada have all proposed water banking plans that have included provisions which, if implemented, would require amending the Law of the River.[286]

Since May 1991, the Bureau of Reclamation has drafted and revised "Draft Regulations for Administering Entitlements to Colorado River Water in the Lower Colorado River Basin."[287] If approved, the draft regulations would allow several new uses of Colorado River water, including: off-reservation banking and leasing of Indian reserved rights currently in use but conserved by either extraordinary measures or land fallowing, interstate leasing of water, and banking of conserved water.[288] The draft regulations are still under review by the Department of the Interior.[289]

The Colorado River Basin Tribes Partnership has also outlined a proposal for banking Colorado River water, inviting Congress to amend the Law of the River to allow the leasing of unused tribal entitlements.[290] The

281. *See* ADWR Preliminary Draft Report, *supra* note 274, at 27. Under the CRBPA, the priority of Central Arizona Project water was subordinated to California's entire 4.4 million acre-feet allocation. *See supra* note 35 and accompanying text.

282. *See* ADWR Preliminary Draft Report, *supra* note 274, at 15–27.

283. *See* ADWR Preliminary Draft Report, *supra* note 274, at 18.

284. *See* Bloom, *supra* note 14, at 143.

285. David H. Getches, *A Colorado River Basin Authority: Opportunity for Sharing River Basin Management and Resources* 1–30 (1989) (presented at Boundaries and Water: Allocation and Use of A Shared Resource, Natural Resources Law Center, 10th Annual Summer Program, June 5–7, 1989).

286. *See* Colorado River Bd. of Cal., Conceptual Approach for Reaching Basin States Agreement on Interim Operation of Colorado River System Reservoirs, California's Use of Colorado River Water Above Its Basic Apportionment, and Implementation of an Interstate Water Bank 10 (Aug. 28, 1991); Ariz. Dep't of Water Resources, Arizona Water Bank Proposal (July 6, 1994); Colorado River Comm'n of Nev., Nevada's Approach to a Lower Division Regional Solution (Apr. 29, 1994); Robert J. Glennon, *Coattails of the Past: Using and Financing the Central Arizona Project*, 27 ARIZ. ST. L.J. 677, 699–708 (1995) (examining how new uses of Colorado River water might impact the Central Arizona Project).

287. U.S. Dep't of the Interior, Bureau of Reclamation, Draft Regulations (May 6, 1994).

288. *Id.* at 1–2, 5, 11–12.

289. *Troubled River,* WATER STRATEGIST, Spring 1995, at 1, 1. The Colorado River Basin Technical Committee, including state and local water agency officials, has failed in an attempt to hammer out a regional solution to the draft regulations. *Id.* Currently, Secretary of the Interior Bruce Babbitt is taking yet another stab at achieving a regional solution by organizing negotiation sessions between "the principal parties." *Id.*

290. Colorado River Basin Tribes Partnership, Proposed Fundamental Components of Colorado River Water Marketing/Banking (Oct. 11, 1994). The Partnership includes the ten

Partnership proposal, like those advanced by California, Nevada and Arizona, suggests innovative approaches to the administration of Colorado River water, although none are likely to achieve consensus. The importance of these proposed arrangements is not in content so much as that they have been made at all: they indicate a willingness of the water interests in the Basin to move forward.[291]

D. Intrastate Marketing by States

Despite Colorado River Basin states' resistance to interstate transfers of water, intrastate marketing has become "a common feature of the Western landscape."[292] The results of a 1986 Western States Water Council survey regarding intrastate water right transfer activity are illustrative.[293] The survey reports that in most western states, temporary transfers or water leasing are permissible, although in every case injury to other vested users is considered by the state in the transfer approval process.[294] Prices paid for transferred water vary widely depending upon a number of factors, including the local supply and demand for water, the priority of the water right, the use to which the water is put, and the locations of the source and destination of the water.[295] Intrastate water rights transfers have taken a variety of forms, including permanent sales of water rights, leases, exchanges of supply, and water futures.[296]

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member tribes of the 7/10 Committee. *See supra* note 265. *See also* Position Paper of the Ten Indian Tribes with Water Rights in the Colorado River Basin, submitted to the Seven States in the Colorado River Basin (transmitted via letter dated May 11, 1992 to Tim Henley, Chief, Colorado River Management, Arizona Department of Water Resources, from Scott B. McElroy, special counsel for water rights for the Southern Ute Indian Tribe).

291. *See* Lindgren, *supra* note 36, at 25–31. Additionally, the Western Governors' Association studied the importance of water rights marketing to their states' economies, and recommended that:

> [t]he [Association] should initiate a working group to include representatives of the [Association], Western States Water Council, and Department of the Interior to consult widely with western water interests to identify steps to facilitate voluntary water transfers and other needed changes and to develop recommendations for changes in law and practice at the federal, state, and local levels.

Western Governors' Association Resolution 86–011 (July 8, 1986), Appendix A to WESTERN GOVERNORS' ASS'N, WATER EFFICIENCY: OPPORTUNITIES FOR ACTION (1987). The Association's report encouraged western states to actively lobby Congress for changes in federal reclamation law to promote water marketing.

292. Shupe, *supra* note 223, at 187 (referring specifically to water rights sales). *See generally* REISNER & BATES, *supra* note 226, at 98–110 (describing water marketing in several western states); Lawrence J. MacDonnell, *Transferring Water Uses in the West*, 43 OKLA. L. REV. 119, 128–29 (1990) (noting state limitations on authorized water transfers).

293. Norman K. Johnson & Charles E. Dumars, *A Survey of the Evolution of Western Water Law in Response to Changing Economic and Public Interest Demands*, 29 NAT. RESOURCES J. 347, 373 (1989) (citing an appendix to WATER EFFICIENCY TASK FORCE, REPORT TO THE WESTERN GOVERNORS' ASS'N, WESTERN WATER: TUNING THE SYSTEM (Bruce Driver ed., 1986)).

294. *Id.*

295. *Id.* Reported prices per acre foot for individual water rights sales ranged from a low of $30 in Utah to $12,500 in New Mexico. *Id.* Wyoming and New Mexico reported that 50 or more water rights are transferred within their states each year, while Colorado, Utah and Nevada reported more than 300 such transfers. *Id.*

296. *See* Shupe, *supra* note 223, at 187–96.

E. Indian Water Settlements

The Supreme Court's ruling in *Arizona v. California* left western states uncertain about the extent of unquantified reserved Indian water rights.[297] As a way of obtaining a judicial determination of unquantified Indian water rights, however, states are authorized under the McCarran Amendment[298] to define federal and Indian reserved water rights in state court general stream adjudications. Significantly, the state court's jurisdiction is limited to procedure.[299] Furthermore, the Supreme Court has expressly warned that "any state court decision alleged to abridge Indian water rights protected by federal law can expect to receive...exacting scrutiny."[300]

Litigation is extremely expensive and time-consuming.[301] Wishing to avoid the costs and risks inherent at trial, and wary of perceived hostility of state courts,[302] many western tribes have opted instead to negotiate their water claims. Notably, several negotiated settlements of tribal water rights have included provisions allowing the limited marketing of water off-reservation. Examples of such agreements include the Southern Arizona Water Rights Settlement Act[303] involving the water rights claims of two districts of the Tohono O'odham Nation, the Salt River Pima–Maricopa Indian Community Water Rights Settlement Act,[304] the Ak–Chin Water Rights Settlement,[305] and

297. *See supra* notes 57–70 and accompanying text.

298. 43 U.S.C. § 666 (1988). The McCarran Amendment waived the immunity of the United States as a defendant in suits for comprehensive stream adjudications. Subsequent Supreme Court decisions extended the reach of the Amendment to Indian reserved water rights held in trust by the United States. *See* Colorado River Conservation Dist. v. United States, 424 U.S. 800 (1976) (holding that the policies underlying the McCarran Amendment generally support the quantification of Indian water rights in comprehensive state adjudications rather than in federal court); Arizona v. San Carlos Apache Tribe, 463 U.S. 545 (1983) (recognizing jurisdiction of state courts to adjudicate Indian water rights even if a tribe has initiated an action in federal court, assuming that the same rights are at issue). For an insightful critique of the Amendment's effectiveness on actual adjudications in the West, see Scott B. McElroy & Jeff J. Davis, *Revisiting Colorado Water Conservation District v. United States—There Must Be a Better Way*, 27 ARIZ. ST. L.J. 597 (1995). The authors conclude that tribal reserved water rights should be determined in federal court and then integrated into state court proceedings. *Id.* *See also* Stephen M. Feldman, *The Supreme Court's New Sovereign Immunity Doctrine and the McCarran Amendment: Toward Ending State Adjudication of Indian Water Rights*, 18 HARV. ENVTL. L. REV. 433 (1994) (arguing that the Supreme Court's decisions requiring adjudication of Indian water rights in state courts were improper).

299. *Colorado River Conservation Dist.*, 424 U.S. at 813.

300. *San Carlos Apache Tribe*, 463 U.S. at 571.

301. *See* Chambers & Echohawk, *supra* note 61, at 455–56. An attorney for one of the key litigants in Arizona's general stream adjudication has estimated that during the first 20 years of the adjudication the parties and the state Department of Water Resources had spent in excess of $50 million on the trial. Memorandum from Michael J. Brophy, Chairman of the Steering Committee of the Gila River Adjudication, to the Steering Committee members (Oct. 22, 1993) (on file with the *Arizona Law Review*). *See also* John E. Thorson, *Resolving Conflicts Through Intergovernmental Agreements: The Pros and Cons of Negotiated Settlements, in* INDIAN WATER 1985, *supra* note 60, at 25 (examining the relatively recent phenomenon of negotiated Indian water settlements).

302. *See* Chambers & Echohawk, *supra* note 61, at 455.

303. Pub. L. No. 97–293, tit. 3, 96 Stat. 1274 (1982). Under the settlement terms, the Tribe consented to limit groundwater pumping in exchange for CAP water and reclaimed water from the City of Tucson delivered to the reservation for irrigation projects. *Id.* The Act expressly provided that the Tribe could market its water off-reservation, but restricted the geographic extent of the permissible market to the groundwater basin underlying the Tucson, Arizona area.

304. Pub. L. No. 100–512, 102 Stat. 2549 (1988). The Community received entitlements to both Salt River and CAP water. Additionally, the Community may lease its CAP allocation in

the Fort McDowell Indian Community Water Rights Settlement.[306] Under the Colorado Ute Indian Water Rights Settlement, Congress authorized the tribe to market San Juan River water off-reservation and into the Lower Basin.[307] However, due to vehement opposition of the Lower Basin states,[308] water transferred off-reservation will be treated as a state water right and not as a *Winters* right, and will be subject to both Colorado State requirements and the Law of the River.[309] The Jicarilla Apache Tribe Water Rights Settlement Act also allows the tribe to subcontract unused San Juan River settlement water for no more than ninety-nine years, but subjects any subcontract to tight constraints on water marketing similar to those found in the Colorado Ute Settlement.[310]

VII. PROPOSED SOLUTIONS

The San Juan River tribes have watched the promise of reserved water rights guaranteed in *Winters* go largely unfulfilled.[311] Moreover, opponents have been successful in preventing or severely restricting the marketing of Indian reserved water rights off-reservation.[312] The tribes now learn that they must forego any new development of their water and bear the burden of the federal government's attempt to revive river fish populations imperiled by the direct actions, not of the tribes, but of their trustee, the federal government itself.[313] The federal government must remedy this injustice. This Note suggests actions available to the government which, if taken together, could significantly ameliorate the present plight of the tribes.

As trustee, the federal government should vigorously pursue amendment of the ESA by Congress, or revision of regulations implementing the ESA to allow a more equitable treatment of tribal interests. For example, when issuing biological opinions under section 1536, the USFWS should include Indian reserved water rights in the environmental baseline.[314] The environmental

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the Phoenix metropolitan area for up to 99 years, commencing in the year 2000. Pub. L. No. 100–512 § 8(a), 102 Stat. 2249, 2554.

305. Pub. L. No. 102–497, 106 Stat. 3255 (1992). The settlement act was amended specifically to authorize the leasing of the Community's unused CAP water off-reservation to the major population centers in Arizona. Pub. L. No. 102–497 § 10(b), 1206 Stat. 3255, 3258.

306. Pub. L. No. 101–628, 104 Stat. 4480 (1990). The Community was authorized to lease 18,233 acre-feet of CAP water off-reservation to the major metropolitan centers of the State of Arizona for up to 100 years. Pub. L. No. 101–628 § 407(a), 104 Stat. 4480, 4487.

307. Colorado Ute Indian Water Rights Settlement Act of 1988, Pub. L. No. 100–585, 102 Stat. 2973 (1988). The Act allows the Tribes to sell, exchange, lease, use or dispose of their water rights. Pub. L. No. 100–585 § 5, 102 Stat. 2973, 2974.

308. *See* Lindgren, *supra* note 36, at 25–13 to 25–14 (describing how the Lower Basin states opposed the proposed transfer terms of the settlement agreement, arguing that it would upset the "painfully developed" constraints of the Law of the River). *But see supra* note 275 (discussing Nevada's sudden interest in marketing proposals that make the Colorado Ute's modest approach seem tame).

309. *See* Joseph R. Membrino, *A Federal Perspective*, *in* INDIAN WATER IN THE NEW WEST, *supra* note 46, at 57, 66.

310. Pub. L. No. 102–441 § 7, 106 Stat. 2237, 2239 (1992).

311. *See supra* notes 91–116 and accompanying text.

312. *See, e.g., supra* note 309 and accompanying text.

313. *See supra* notes 197–99 and accompanying text.

314. This position has been previously advocated by Indian water lawyers, *see* Pollack, *supra* note 208, at 10, and tribal leaders, *see* Hearings before the Subcommittee on Water and Power, Committee on Energy and Natural Resources (June 9, 1994) (statement of George Arthur, President, Colorado River Basin Tribes Partnership).

baseline should treat quantified Indian reserved rights as if in actual use, even though the rights have yet to be developed. Consequently, Indian tribes would preserve their ability to ultimately use quantified, but dormant, reserved rights because the rights will have been factored into the environmental baseline used to gauge the impact of agency actions.

Furthermore, the fact that a tribe's reserved water has not yet been quantified should not exempt the tribal water right from being included in the environmental baseline. In such cases, the Secretary of the Interior as trustee to the tribe should provide the USFWS with a reasonable estimate of the tribe's water right based on the PIA or other appropriate standard. Although included in the baseline, the estimate would be non-binding in the eventual adjudication or negotiation of the tribal reserved right.

When evaluating the designation of critical habitat, the USFWS cannot ignore its trust responsibility to tribes. Therefore, the USFWS must study and report the specific economic impact on Indian tribes of the designation action. The study must include potential impacts of the agency action on the tribes' presently utilized water rights and on unused rights that may be affected by the habitat designation. Where equally effective habitat designation alternatives exist, the USFWS is compelled by the trust responsibility to choose the alternative that concurrently protects tribal interests.

If, despite the protections imposed by the trust responsibility, designation of critical habitat prevents the development of San Juan River tribal water, the Secretary of the Interior could assure that the costs of protecting the endangered species are borne by the ultimate consumers of tribal water left in the river. Professor Getches has suggested that an endangered species protection surcharge could be assessed against the beneficiaries receiving water the tribes might have developed but for the use restrictions imposed by the ESA.[315] This approach is essentially an "involuntary" forbearance agreement under which the downstream users of tribal water preempted for endangered species survival would compensate the tribes for the value of the water.[316] It would also have the equitable effect of transferring part of the burden of protecting endangered species from Indian tribes to those who are able to use the preempted tribal reserved water. However, determining precisely who these downstream beneficiaries are and how much preempted water the beneficiaries received would be administratively complex.

From the perspective of the San Juan River Indian tribes, a more reliable and direct approach would be to market the preempted water to Lower Basin users. Any proposal to market Upper Basin tribal water to the Lower Basin would inevitably be greeted by a choir of voices in protest. However, because

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"Environmental baseline" is defined at 50 C.F.R. § 402.02 (1994). An environmental baseline includes the past and present impact of all federal, state or private actions and other human activities in the area affected by federal action. *Id.* The baseline serves as a point of reference against which the effects of an action on a species or critical habitat can be gauged. *Id.*

315. Getches, Testimony, *supra* note 233. Professor Getches envisioned that the full cost of endangered species recovery would be allocated to the downstream water user, not just the cost of lost benefits to the interests prevented from making use of their water rights.

316. One example of a voluntary forbearance agreement is a contract entered between the State of Wyoming and the Arapahoe and Shoshone tribes. In exchange for $5 million, the tribes consented in 1989 to refrain from using part of their reserved rights during the irrigating season so that non-Indian farmers could water their crops. Weldon, *supra* note 46, at 83.

the tribes are prevented by federal endangered species protection law from diverting their reserved water for use on tribal lands for any purpose, arguments against tribal water marketing have little basis in equity. If water cannot be used on the land itself to sustain a homeland for the tribes, then the tribes must at least obtain the value of the water right. Payments in lieu of water could then be used to develop the reservation economy.

Congress is authorized to unilaterally revise the Law of the River.[317] This Note suggests that the preemption of senior priority Indian reserved rights due to ESA constraints compels Congress to authorize the marketing of tribal water to Lower Basin markets. Indeed, if interbasin marketing of reserved tribal water rights is deemed to have harmed junior downstream users, the National Water Commission has proposed that the federal government either compensate the junior party or provide it with an alternative water supply.[318] The Commission recommended that such compensation should be viewed as "a general obligation of the Nation as a whole."[319] Certainly, this is a just solution in light of the fact that reclamation projects built by the tribes' trustee for the benefit of non-Indians directly caused the endangerment of the native Colorado River fishes.

It is not the purpose of this Note to examine potential sources for federal compensation of junior users harmed by San Juan River tribal water marketing. This Note does, however, argue that compensation to harmed junior users should not derive from the Indian marketing arrangement. Factoring such a compensation obligation into a tribal water marketing agreement would certainly render it uncompetitive, and ignores the federal government's violation of its trust responsibility in willfully promoting development of junior water uses to the ultimate detriment of its trustors' water rights.

Due to excessive demand in the Lower Basin and underutilization of Upper Basin water, interbasin water marketing is inevitable. Holders of Upper Basin state water rights are poised to lease water to thirsty municipalities and other interests in Nevada and California. Despite the fact that the San Juan tribes' priority ranks senior to most other water rights, downstream water users may be hesitant to contract with the tribes. To ensure that the tribes may finally enjoy the benefit of their senior priority rights, in authorizing the interbasin marketing of tribal reserved rights Congress should require that tribal water preempted by the enforcement of the ESA be preferred over any competing source of Upper Basin water with a junior priority.

Additionally, Congress must amend the Colorado Ute and Jicarilla Apache settlement agreements to remove any restrictions to marketing the full

317. *See* Getches & Meyers, *supra* note 180, at 70 (suggesting that Congress is unlikely to do so unless "considerable injustice to some state or other entity can be shown"). *See also* E. Lief Reid, *Ripples from the Truckee: The Case for Congressional Apportionment of Disputed Interstate Water Rights*, 14 STAN. ENVTL L.J. 145 (1995) (making a strong case that congressional apportionment of disputed waters is a uniquely flexible resolution mechanism for interstate water disputes where issues are complex and parties diverse).

318. *See* WATER COMMISSION, *supra* note 56, at 481–83 (the Commission's recommendation anticipated situations where Indian use actually impaired the earlier use of a junior priority holder, and the affected junior use was initiated prior to the Supreme Court's decision in Arizona v. California, 373 U.S. 546 (1963)).

319. WATER COMMISSION, *supra* note 56, at 482. This seems reasonable because Indian reserved water rights are based on treaty obligations and other commitments assumed by the federal government.

amount of tribal reserved water preempted by the ESA. For example, the Colorado Ute Act must be amended to require that preempted tribal water marketed to the Lower Basin will be considered as an Indian reserved right and not as a state water right, and will carry a priority date of the establishment of the tribes' reservations.

VIII. CONCLUSION

Despite its trust obligation to American Indian tribes, the federal government has acted to prevent tribes along the San Juan River from developing their senior priority reserved water rights. The Bureau of Reclamation permanently altered the nature of the Colorado River system, creating dams and diversion projects for the benefit of non-Indian users, while largely ignoring the water needs of the San Juan River tribes, and disregarding its trust responsibility to those tribes. Drastic impacts of the reclamation projects have threatened native San Juan River fishes with extinction. As a result, the powerful protections of the federal ESA have largely thwarted reclamation projects intended to utilize the tribes' San Juan River water. Yet, the federally authorized scheme regulating the use of Colorado River Basin water prevents the tribes from marketing this water to thirsty Lower Basin users. Thus, downstream interests continue to enjoy the benefit of Indian water without cost, as they have done for generations, while the tribes are unable to obtain economic value for their reserved water rights.

If the federal government's fiduciary duty to the San Juan River tribes is to have any meaning, the government must take affirmative actions to mitigate this situation. This Note proposes two approaches the government may take to diminish the burden on the tribes. First, the federal government should push for amendment of the ESA to require particular scrutiny of potential economic impacts of enforcement of the Act on tribal interests. If mitigation alternatives are available, the United States, as trustee, must chose the alternative that best protects tribal interests. Where the analysis involves the development of tribal water rights, the USFWS should treat potential development of unexercised tribal reserved rights as existing uses in defining environmental baselines.

Second, Congress should authorize the marketing of San Juan River tribal water rights both off-reservation and to the Lower Basin. Additionally, Congress should grant primacy to tribal water preempted from development by the restrictions of the ESA over any lower priority Upper Basin water considered for Lower Basin markets. If existing tribal water settlements and other congressional agreements require amendment to permit the unfettered marketing of preempted tribal water, the federal government must facilitate the amendment. Claims of injury by downstream junior water users as a result of the marketing of preempted tribal water rights should be the responsibility of the federal government. In short, the federal government must recognize the tribes' claims to the San Juan River for what they have become: an endangered species of water right.